

GENERAL EXPLANATIONS

1. INTRODUCTION

This report contains a description of each of the 453 industries into which manufacturing establishments were classified in the 1947 Census of Manufactures. It is a preprint of Appendix C of the final bound volumes of this Census.* Complete census statistics are being published in three volumes: Volume I, *General Summary*, shows comparative statistics of industries, States, and principal metropolitan areas on the more important measures of the activities of manufacturing establishments—employment, pay rolls, inventories, capital expenditures, value added by manufacture, important materials consumed, etc.; Volume II, *Statistics by Industry*, is organized by industry and includes statistics on the measures given above, and on cost of materials and the quantity and value of individual products shipped, together with summary general statistics, by State or geographic division and by size of establishment; Volume III, *Statistics by States*, shows for each State and its important metropolitan areas and industrial counties, summary general statistics (number of establishments, employment, pay rolls, value added by manufacture, and capital expenditures) for each of the industries of consequence in that State and in its principal metropolitan areas and industrial counties. Totals for all manufacturing are shown for all counties and for urban places of more than 10,000 population.

The 1947 Census of Manufactures is the first to be taken since 1939. The first Census of Manufactures covered the year 1809 and a census was taken at 10-year intervals in connection with the Decennial Census of Population up to and including 1899, with the exception of 1829. It was conducted at 5-year intervals from 1904 through 1919, and every other year from 1921 through 1939, but was suspended during the war period. Present legislation provides for a Census of Manufactures to cover the year 1953 and every fifth year thereafter.

More than 200 different report forms were used to canvass the establishments included in the 1947 Census. With a few exceptions, the general information requested was the same for all forms, but in addition each form contained inquiries adapted to the requirements for information on production of commodities, materials consumption, and equipment in use from one or several of the more than 450 manufacturing industries recognized by the Standard Industrial Classification.

*The final bound volume of this census will become available in April 1950.

2. ESTABLISHMENTS COVERED IN THE CENSUS

To the extent possible, the Census of Manufactures is conducted on an establishment basis. That is, a company operating establishments at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports insofar as the plant records permit such a separation. Census figures must, therefore, be expected to differ substantially from those prepared on a company basis, e.g., from consolidated reports which not only combine activities at different locations but also include the nonmanufacturing activities of companies primarily engaged in manufacturing. Census figures will also differ to some extent from other tabulations based on establishment reports, where the definition of an establishment as to location and line of activity is not so rigidly applied.

In 1947, as in earlier years, a minimum size limit for establishments was set for inclusion in the census. In other recent censuses, establishments having less than \$5,000 value of products were designated as out of the scope of the census. In the 1947 census, on the other hand, reports were required from all establishments employing one or more persons at any time during the census year. In several of the apparel industries reports were obtained from jobbers, whether or not they reported any employment in 1947, since contractors are normally unable to report cost of materials and value of products shipped.

The change in the minimum size limit in 1947 as compared with 1939 has not, however, appreciably affected the comparability of the figures for these two years, except for data on number of establishments for a few industries. In 1939, establishments with no employees amounted to fewer than 5,000 and accounted for less than one-half of one percent of the value added by manufacture in that year. A preliminary study of the 1947 tabulations indicates that a somewhat larger number of reports showing less than \$5,000 value of products was tabulated for that year.

3. ESTABLISHMENTS COVERED IN THE CENSUS—TYPE

Except for relatively minor modifications, the 1947 Census of Manufactures covers all

establishments primarily engaged in manufacturing as defined in the *Standard Industrial Classification Manual*, Volume I, Manufacturing Industries, dated November 1945. Differences in content between the Census and Standard Industrial Classification industry are noted in this report in the description of the Census industry.

The Standard Industrial Classification Manual describes manufacturing establishments as those engaged in the mechanical or chemical transformation of inorganic or organic substances into new products. These activities are usually carried on in plants, factories, or mills, which characteristically use power-driven machines and materials-handling equipment.

Manufacturing production is usually carried on for the wholesale market, for interplant transfer, or to order of industrial users rather than for direct sale to the household consumer. Some manufacturers in a few industries sell chiefly at retail to domestic consumers through the mail, through house-to-house routes, or through salesmen. Some activities of a service nature (enameling, china decorating, etc.), when performed primarily for the trade are included in the manufacturing division; when performed primarily to the order of the household consumer, they are considered nonmanufacturing.

There are indicated below the more important instances in which both census and standard classification may differ from common usage as well as those few instances in which census procedure differs from standard. A more detailed comparison of 1947 Census and Standard Industrial Classification systems is included in Appendix E of the Census of Manufactures final volumes.

(a) The following types of activities are defined as nonmanufacturing by the Standard Industrial Classification and are also excluded from the Census of Manufactures:

Processing on farms if the raw materials are grown on the farm and if the manufacturing activities are on a small scale without extensive use of paid labor. Also custom milling, cotton ginning and similar activities.

Dressing and beneficiating of ores, and the breaking, washing, and grading of coal.

Jobbing by establishments which do no manufacturing but assign materials to contractors to be fabricated by them; the Census of Manufactures does, however, include jobbing in the textile, apparel, and leather industries.

Manufacturing activities of certain establishments which sell most of their products at retail on the premises, e.g., single-shop bakeries.

Fabricating operations performed at the site of construction by contractors.

Production by public utilities of electric power or of heating, cooking, and illuminating gas distributed through mains.

Custom work to the individual order of household consumers, such as custom tailoring or woodworking.

Repair and other service activities except specified services performed "for the trade." Machine shops engaged exclusively or almost exclusively in repair work and railroad repair shops are also excluded.

Engineering, design, and experimental work, except in the aircraft industry, or when carried on at establishments primarily engaged in manufacturing activities.

Educational, eleemosynary, and penal institutions engaged in some manufacturing.

(b) The following types of activities, though not universally considered to be manufacturing, are so classified by the Standard Industrial Classification and are included in the Census of Manufactures:

- Printing
- Publishing
- Custom slaughtering
- Rice cleaning and polishing
- Scouring and combing textile fibers
- Apparel contracting
- Wood preserving
- Electroplating, plating, and polishing
- Galvanizing
- Job stamping, casting, machining
- Lapidary work

(c) The following types of establishments are classified as manufacturing by the Standard Industrial Classification but excluded from the census, mainly because of the difficulties involved in locating the plants or securing reports in the detail required for a Census of Manufactures:

Establishments with no employees in 1947. An exception to this policy was made in the case of textile, apparel, and leather jobbers (see *d* below).

Sawmills producing less than 200 M ft. b.m. of lumber in 1947. Statistics on lumber production were, however, obtained from all such establishments.

Logging camps and logging contractors.

Fire distilling of gum naval stores.

Establishments producing cut-stone and stone products from own quarried stone.

Establishments primarily rebuilding motor vehicle parts.

(d) The following types of establishments were covered in the census though not classified

as manufacturing by the Standard Industrial Classification:

Textile, apparel, and leather jobbers who do no manufacturing but who assign material to contract factories for fabrication. These were included for the purpose of providing complete information on materials, products, and value added by manufacture.

(e) Military arsenals, Navy yards, and Government printing establishments were not included in the census.

4. DEFINITION OF INDUSTRIES AND GROUPS OF INDUSTRIES

An industry consists of a group of establishments primarily engaged in the same line or similar lines of economic activity. In the manufacturing field, the line of activity is generally defined in terms of the products made or the processes of manufacture used. On this basis, there may theoretically be thousands of manufacturing industries corresponding to the different types of products and the processes used in their manufacture. However, industries established in this manner would be too numerous to deal with and, further, would not generally satisfy the criteria considered essential in the creation of a good system of industry classification.

Except for certain relatively minor modifications, the 453 manufacturing industry classifications used in this census were derived from the 1945 Standard Industrial Classification Manual issued by the Bureau of the Budget. The following general principles were followed in the preparation of this system of industry classification:

(1) The classification should conform to the existing structure of American industry;

(2) The reporting units to be classified are establishments (for definition of establishment, cf. Section 2 above), rather than legal entities or companies, and each establishment is to be classified according to its major activity;

(3) To be recognized as an industry, each group of establishments must have significance from the standpoint of the number of establishments, volume of business, employment and pay rolls, and other important economic features.

In addition to the above principles, it is important that an industry comprise a group of establishments; (a) whose output consists, to a relatively large extent, of the products defining the industry; and (b) whose output of the products defining the industry accounts for a relatively high proportion of the total output

of those products by establishments in all industries. Finally, (c) the output of the bulk of the establishments should be distributed among the various products or groups of products defining the industry; if any considerable number of establishments concentrated on the production of a single product within the group of products defining the industry, such concentration would constitute the basis for a further subdivision of the industry.

Following standard practice, the classification system used in this Census groups the 453 individual manufacturing industries into 141 sub-groups comprising a small number of closely related individual industries (in some cases only one industry) and further into 20 major industry groups comprising several industry sub-groups. Each individual industry is designated by a 4-digit code, each industry sub-group by a 3-digit code identical with the first three digits of its component industries, and each major industry group by a 2-digit code identical with the first two digits of its component industry sub-groups. For brevity, individual industries are sometimes referred to as 4-digit industries, sub-groups as 3-digit industries, and major industry groups as 2-digit industries.

5. CLASSIFICATION OF ESTABLISHMENTS INTO INDUSTRIES

An establishment is assigned to, or classified in, an industry, generally on the basis of the principal products made. The products made by each establishment are grouped according to the industries to which they "belong" and the group of products accounting for the principal portion of the total value of shipments of the establishment determines its industry classification. This group of products is said to be the primary products of the establishment as well as of the industry which it defines; all other products made by establishments classified in the industry are referred to as secondary products.

In some instances, a knowledge of the types and value of products shipped is not sufficient for determining the proper industry classification of an establishment. It may also be necessary to know the process used in the manufacture of the products, or the materials used, or other characteristics of the operations of the establishment. For example, an establishment primarily engaged in producing insulated copper wire is classified in Industry 3392, Wire Drawing, if it purchases copper rods, draws the rods into wire, and insulates the wire; but in Industry 3631, Insulated Wire and Cable, if it purchases copper wire and insulates it.

In a classification system dividing the manufacturing field into some 450 separate

industries to which establishments are assigned on the basis of their principal activity, a certain amount of overlapping production by one industry of products of other industries, is bound to arise. Such overlapping is particularly prevalent in such industry groups as apparel, furniture, and metal fabricating, where establishments within each group, employing the same basic types of machinery and fabricating operations, produce a wide variety of products belonging to a number of different industries. For 1947, the average amount of overlapping for all industries was approximately ten percent in both directions, compared with from 15 to 20 percent for the furniture and metal fabricating (except transportation equipment) group of industries. The greater the degree of overlapping, the less meaningful are the relationships between general and product statistics for the particular industry. Measures of overlapping production for each of the 1947 industries are apparent by an examination of the 1947 shipments of primary products shown for each of the industries. These measures are derived from table 5 of the industry reports.

In the tables on the following pages, the first column shows the 1947 Census industry group (3-digit) and industry (4-digit) codes.

Where the 1947 census industry differs in content from the Standard Industrial Classification industry with the same code, the equivalent Standard Industrial Classification codes are shown in parentheses following the census short title. The "Title and description" column shows the census short title followed, where applicable, by parentheses showing the Standard Industrial Classification full title and nature of the difference, if any, between the census and Standard Industrial Classification industries bearing the same code. The industry descriptions are based largely upon the Standard Industrial Classification. The last two columns show the value of primary products shipped by the specified industry (products included, by definition, in the specified industry) as a percentage of (a) total value of primary and secondary products shipped by the specified industry, not including miscellaneous receipts for contract work on materials owned by others, scrap and salable refuse, and nonmanufacturing activity (merchandising, construction, repair, etc.), and (b) total value of these primary products of the specified industry shipped by all industries. The following abbreviations are used: SIC—Standard Industrial Classification; n.e.c.—not elsewhere classified; n.a.—not available.

APPENDIX C—INDUSTRY DESCRIPTIONS

This appendix contains descriptions of each of the industries used in the 1947 Census of Manufactures. The first column shows the 1947 census industry group (3-digit) and industry (4-digit) codes. Where the census industry differs in content from the Standard Industrial Classification industry with the same code, the equivalent Standard Industrial Classification codes are shown in parentheses following the census short title. The "Title and description" column shows the census short title followed, where applicable, by parentheses showing the Standard Industrial Classification full title and nature of the difference, if any, between the census and Standard Industrial Classification industries bearing the same code. The industry descriptions are based largely upon the Standard In-

dustrial Classification. The last two columns show the value of primary products shipped by the specified industry (products included, by definition, in the specified industry) as a percentage of (a) total value of primary and secondary products shipped by the specified industry, not including miscellaneous receipts for contract work on materials owned by others, scrap and salable refuse, and nonmanufacturing activity (merchandising, construction, repair, etc.), and (b) total value of these primary products of the specified industry shipped by all industries. The following abbreviations are used: SIC—Standard Industrial Classification; n.e.c.—not elsewhere classified; n.a.—not available.

MAJOR GROUP 20—FOOD AND KINDRED PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole			
	This major group includes establishments manufacturing foods and beverages for human consumption, and certain related products, such as manufactured ice, chewing gum, and prepared feeds for animals and fowls. Establishments which manufacture dairy products and are also engaged in the distribution of fluid milk or cream are classified in trade industries. Establishments producing meat, poultry, dairy, bakery, and confectionery products for sale chiefly at retail on the manufacturing premises are also classified in trade industries.			
201	MEAT PRODUCTS			
2011	Meat packing, wholesale (Includes SIC Industry 2011, Meat packing, wholesale; and 2012, Custom slaughtering, wholesale)----- Establishments primarily engaged in the slaughtering of cattle, hogs, sheep, lambs, calves, and other animals, for meat to be sold fresh or to be used on the same premises in canning and curing, and in making sausage, lard, and other products. Important products of this industry include fresh meat (beef, veal, mutton, lamb, and pork); cured beef and pork; canned beef, pork, and other meat goods; sausage, and lard. Establishments manufacturing sausages and meat specialties from purchased meats are classified in Industry 2013; and establishments killing, dressing, and packing poultry, rabbits, and other small game in Industry 2015.	208.4	96	99
2013	Prepared meats (Includes SIC Industry 2013, Sausages and other prepared meat products; and natural sausage casings from 2014, Sausage casings)----- Establishments primarily engaged in manufacturing sausages, prepared meats, meat specialties, and animal casings, but performing no slaughtering operations on the premises. Sausage or meat kitchens operated by packing houses as separate establishments also are included in this industry.	44.4		
2015	Poultry dressing, wholesale (Part of SIC Industry 2015, Poultry and small game dressing and packing, wholesale [excludes canned poultry and chicken soup])----- Establishments primarily engaged in killing, dressing, and packing poultry, rabbits, and other small game for the trade. Important products of the industry include dressed and packed poultry (chickens, turkeys, ducks, and geese), dressed rabbits, and dressed hares. Establishments primarily engaged in canning chicken soup and poultry (whole and parts) are classified in Industry 2033.	21.7		

See footnotes at end of table.

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MAJOR GROUP 20—FOOD AND KINDRED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
202	DAIRY PRODUCTS			
2021	Creamery butter Establishments primarily engaged in manufacturing creamery butter, but which are not engaged in the house-to-house distribution of fluid milk or cream. This industry does not include the production of butter on farms, classified in Agriculture; milk and cream assembly stations, classified in trade industries; or establishments primarily engaged in manufacturing processed and ladle butter, classified in Industry 2025.	20.6	80	71
2022	Natural cheese Establishments primarily engaged in manufacturing all types of natural cheese, including cottage cheese, but which are not engaged in the house-to-house distribution of fluid milk or cream. Establishments primarily engaged in manufacturing processed cheese are classified in Industry 2025.	12.3	83	81
2023	Concentrated milk (<i>Condensed and evaporated milk</i>) Establishments primarily engaged in manufacturing condensed and evaporated milk, and related products such as sweetened condensed milk (case and bulk goods); unsweetened condensed and evaporated milk; condensed and evaporated buttermilk; dried and powdered skim milk, whole milk, whey, and buttermilk; and ice-cream mix and ice-milk mix made for sale as such.	16.6	84	73
2024	Ice cream and ices Establishments primarily engaged in manufacturing ice cream, ices, and other frozen desserts, but which are not engaged in the distribution of fluid milk or cream.	35.8	91	69
2025	Special dairy products Establishments primarily engaged in manufacturing special dairy products, but which are not engaged in the distribution of fluid milk or cream. Important products of this industry include processed and ladle butter, malted milk, and fermented milk; and processed cheese, cheese pastes, and spreads made from natural cheese. Establishments primarily engaged in manufacturing creamery butter are classified in Industry 2021, natural cheese in Industry 2022, and dried or powdered milk in Industry 2023.	7.4	90	72
203	CANNING, PRESERVING, AND FREEZING			
2031	Canned sea food Establishments primarily engaged in cooking and canning fish, shrimp, oysters, clams, crabs, and other sea foods. Establishments primarily engaged in shucking and packing fresh oysters in nonsealed containers are classified in trade industries.	20.2	91	96
2032	Cured fish Establishments primarily engaged in smoking, salting, drying, or otherwise curing fish for the trade.	2.4	97	88
2033	Canning and preserving, except fish (<i>Includes SIC Industry 2033, Canned fruits, vegetables, and soups; preserves, jams and jellies; canned poultry and chicken soup from 2015, Poultry and small game dressing and packing, wholesale; and mincemeat from 2099; Food preparations, not elsewhere classified</i>) Establishments primarily engaged in canning fruits and vegetables, and fruit and vegetable juices (including soups), and in manufacturing preserves, jams, and jellies. Important products of the industry include canned vegetables (including canned baked beans, and tomato cocktail); fruit and vegetable juices (canned, bottled, and in bulk); canned spaghetti; canned soups (except sea foods—Industry 2031); canned poultry products; canned fruits (including fruit salad and fruit cocktail); preserves, jams, jellies, fruit butters, and maraschino cherries.	136.0	91	95
2034	Dehydrated fruits and vegetables (<i>Dried and dehydrated fruits and vegetables</i>) Establishments primarily engaged in sun-drying or artificially dehydrating fruits and vegetables, including packaged soup mix prepared from dehydrated vegetables.	4.0	96	90
2035	Pickles and sauces (<i>Includes SIC Industry 2035, Pickled fruits and vegetables, vegetable sauces and seasonings, and salad dressings; and sandwich spread—salad dressing base, from 2099, Food preparations, not elsewhere classified</i>) Establishments primarily engaged in pickling, brining, and sulphuring fruits and vegetables, and in manufacturing salad dressings, vegetable relishes, sauces, and seasonings. Important products of this industry include pickles; ketchup (canned, bottled, and in bulk); brined and sulphured fruits and vegetables; prepared horseradish; sauerkraut in bulk; prepared mustard; tomato chili and other vegetable sauces; mayonnaise; cooked salad dressing and raw salad dressings, such as French, Thousand Island, and Russian; sandwich spread, salad dressing base. The industry includes salting stations producing brined pickle stock, and finishing plants at which the stock is treated with vinegar, spices, etc.	21.7	88	70

See footnotes at end of table.

MAJOR GROUP 20—FOOD AND KINDRED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
203	CANNING, PRESERVING, AND FREEZING—Continued			
2037	Frozen foods (<i>Frozen fruits, vegetables, and sea foods</i>)----- Establishments primarily engaged in quick-freezing and cold-packing (freezing) vegetables, fruits, fish, and shellfish. The industry does not include establishments primarily engaged in packing fruits and vegetables for freezing, but not freezing the product; cold storage warehouses freezing foods for others; farms and ranches producing frozen foods; nor frozen food locker plants and other establishments freezing for individual consumers.	17.4	89	83
204	GRAIN-MILL PRODUCTS			
2041	Flour and meal (<i>Flour and other grain-mill products</i>)----- Establishments primarily engaged in milling flour or meal from grain, except rice (Industry 2044). Such flour and grain mills may also produce blended and prepared flours, principally from products ground in the same establishment. Important products of this industry include wheat flour (white; semolina; farina; granular; graham; whole-wheat; blended, phosphated, enriched, self-rising, and other prepared flour); rye, buckwheat, corn and other flour; corn meal; corn grits and flakes for brewers' use; and bran and middlings.	39.5	92	95
2042	Prepared animal feeds (<i>Prepared feeds for animals and fowls</i>)----- Establishments primarily engaged in manufacturing prepared feeds for animals and fowls. Prepared feeds include those made from milled grains; animal, marine, and vegetable proteins; alfalfa meals, bone meal, calcium carbonate, manganese, and other mineral supplements; fish liver oils, distillers' solubles, and other vitamin supplements. Some of these establishments grind some or all of the grain they use, and others purchase all their materials. Establishments primarily engaged in custom grinding of feeds are not included in manufacturing.	55.3	94	89
2043	Cereal preparations ----- Establishments primarily engaged in manufacturing breakfast foods, coffee substitutes, and other cereal preparations from grain, including flaked corn and wheat, shredded and cracked wheat, rolled oats and puffed wheat and rice. Establishments primarily engaged in manufacturing corn grits and hominy for human consumption are classified in Industry 2041.	11.3	68	87
2044	Rice cleaning and polishing ----- Establishments primarily engaged in cleaning and polishing rice, and in manufacturing rice flour or meal. Important products of this industry include brown rice, milled rice (including polished rice), rice polish, rice bran, and rice flour. Rice mills doing business on a custom, exchange, or toll basis are included in this industry.	4.1	100	100
2045	Blended and prepared flour ----- Establishments primarily engaged in the preparation of self-rising or blended flour from purchased flour. Important products of this industry include plain blended flour, and phosphated, self-rising, and other kinds of prepared flour such as biscuit, cake, doughnut, and pancake flour. Establishments primarily engaged in grinding flour from grain are classified in Industry 2041.	3.1	81	67
205	BAKERY PRODUCTS			
2051	Bread and other bakery products (<i>Bread and other bakery products—except biscuit, crackers, and pretzels</i>)----- Establishments primarily engaged in manufacturing bread, cakes, hand-made cookies, doughnuts, pies, pastries, and similar "perishable" bakery products. Establishments primarily engaged in producing "dry" bakery products such as biscuit, crackers, and pretzels are classified in Industry 2052. Independent bakeries selling chiefly at retail on the manufacturing premises are not included in manufacturing.	233.3	98	100
2052	Biscuit, crackers, and pretzels ----- Establishments primarily engaged in manufacturing biscuit (except raised biscuit), crackers, sponge goods, sweet goods, machine-made cookies, pretzels, and similar "dry" bakery products. Establishments primarily engaged in producing "perishable" bakery products are classified in Industry 2051.	46.1	96	93
206	SUGAR			
2061	Raw cane sugar (<i>Cane sugar—except refining only</i>)----- Establishments primarily engaged in manufacturing raw sugar, sirup, or finished (granulated or clarified) cane sugar from sugar cane. Sugar refineries primarily producing refined cane sugar from raw sugar are classified in Industry 2062.	4.6	97	100

See footnotes at end of table.

MAJOR GROUP 20—FOOD AND KINDRED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
206	SUGAR—Continued			
2062	Cane-sugar refining Establishments primarily engaged in refining purchased raw cane sugar.	17.4	100	100
2063	Beet sugar Establishments primarily engaged in manufacturing sugar from sugar beets.	13.4	100	100
207	CONFECTIONERY AND RELATED PRODUCTS			
2071	Confectionery products (<i>Candy and other confectionery products</i>) Establishments primarily engaged in manufacturing candy and other confections, such as chocolate candies (fancy package, bulk, or count), chocolate-covered bars, marshmallows, lozenges, fudge, candied and crystallized fruits, candy-covered nuts, salted nuts, stuffed dates, popcorn balls, and related products. Establishments primarily engaged in manufacturing solid chocolate bars are classified in Industry 2072, and chewing gum in Industry 2073. Retail shops which sell most of the candy they make at retail from the manufacturing premises are not included in manufacturing.	75.2	97	97
2072	Chocolate and cocoa products Establishments primarily engaged in manufacturing chocolate and cocoa butter from cocoa beans, and in the further manufacture of cocoa, solid chocolate bars, and chocolate coatings. Important products of this industry include chocolate (unsweetened, sweet, milk), chocolate coatings (sweet, milk, and liquor), powdered cocoa (unsweetened, sweetened, or mixed with other substances), cocoa butter, and chocolate sirups. Establishments primarily engaged in manufacturing instant chocolate and cocoa from purchased chocolate and cocoa are classified in Industry 2099; and chocolate candies (fancy package, bulk, or count), in Industry 2071.	9.6	199	100
2073	Chewing gum Establishments primarily engaged in the manufacture of chewing gum from such materials as crude gum or chicle, essential oils, flavoring extracts, sugar, etc.	6.9	(d)	(d)
208	BEVERAGES			
2081	Bottled soft drinks (<i>Bottled soft drinks and carbonated waters</i>) Establishments primarily engaged in manufacturing bottled soft drinks (nonalcoholic beverages) and carbonated waters. Establishments primarily engaged in manufacturing fruit and vegetable juices are classified in Industry 2033, fruit sirups for flavoring in Industry 2095, and cider in Industry 2096. Establishments primarily engaged in bottling natural spring waters are classified in trade industries.	79.4	99	99
2082	Malt liquors Establishments primarily engaged in manufacturing all kinds of malt liquors such as ale, beer, porter, and stout and malt extract. Establishments primarily engaged in bottling purchased malt liquors are classified in trade industries.	82.5	100	99
2083	Malt Establishments primarily engaged in manufacturing malt from barley and other grains.	2.5	100	100
2084	Wines and brandy (<i>Includes SIC Industry 2084, Wines; and brandy from 2085, Distilled, rectified, and blended liquors</i>) Establishments primarily engaged in manufacturing wines, brandy, and fruit spirits for wine fortification. Establishments primarily engaged in bottling purchased wines, but which do not manufacture or blend wines, are classified in trade industries.	7.7	(2)	(2)
2085	Distilled liquors, except brandy (<i>Part of SIC Industry 2085, Distilled, rectified, and blended liquors [excludes brandy]</i>) Establishments primarily engaged in manufacturing alcoholic liquors (except brandy) by distillation and rectification, and in manufacturing cordials and alcoholic cocktails by blending processes or by mixing liquors and other ingredients. Important products of this industry include grain alcohol (wine spirits), straight and blended whiskies, rum, gin, cordials, liqueurs, and prepared alcoholic cocktails. Establishments primarily engaged in manufacturing brandy are classified in Industry 2084; industrial alcohol, in Industry 2829; and those only bottling purchased liquors, in trade industries.	30.4	99	99
209	MISCELLANEOUS FOOD PREPARATIONS			
2091	Leavening compounds (<i>Baking powder, yeast, and other leavening compounds</i>) Establishments primarily engaged in manufacturing baking powder, yeast, and other compounds used for leavening purposes.	3.1	(d)	(d)

See footnotes at end of table.

MAJOR GROUP 20—FOOD AND KINDRED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
209	MISCELLANEOUS FOOD PREPARATIONS—Continued			
2092	Shortening and cooking oils (<i>Shortening and other cooking and edible fats and oils, not elsewhere classified</i>) Establishments primarily engaged in manufacturing edible vegetable and compound shortenings, vegetable cooking oils, salad oils, and other refined table oils, not elsewhere classified, by further processing of purchased animal and vegetable oils. Establishments primarily engaged in producing oleomargarine are classified in Industry 2093, corn oil in Industry 2094, and cottonseed, linseed, soybean, marine, and other animal and vegetable oils in Group 288.	8.0	69	95
2093	Oleomargarine Establishments primarily engaged in manufacturing oleomargarine, margarine, nut margarine, etc.	2.6	81	73
2094	Corn products (<i>Corn sirup, corn sugar, corn oil, and starch</i>) Establishments primarily engaged in manufacturing sirup, sugar, oil, and starch from corn. Establishments primarily engaged in manufacturing potato, rice, wheat, root, and other starches are also included in this industry.	12.3	88	96
2095	Flavorings (<i>Flavoring extracts and flavoring sirups, not elsewhere classified</i>) Establishments primarily engaged in manufacturing flavoring extracts, sirups, and fruit juices, not elsewhere classified, for soda fountain use or for the manufacture of soft drinks, and colors for bakers' and confectioners' use. Important products of this industry include flavoring extracts; flavoring concentrates; flavoring powders and pastes; burnt-sugar and other food colors; flavoring sirups; and crushed fruit for fountain use.	11.7	94	90
2096	Vinegar and cider Establishments primarily engaged in manufacturing vinegar and cider in factories, not including small custom mills or those located on farms which are classified in Agriculture.	1.0	92	37
2097	Manufactured ice Establishments primarily engaged in manufacturing ice for sale. Establishments primarily engaged in manufacturing dry ice are classified in Industry 2896, and the harvesting and storage of natural ice, in trade industries.	46.5	100	98
2098	Macaroni and spaghetti (<i>Macaroni, spaghetti, vermicelli, and noodles</i>) Establishments primarily engaged in manufacturing macaroni, spaghetti, vermicelli, and noodles.	8.0	98	99
2090	Liquid, frozen, and dried eggs (<i>Part of SIC Industry 2099, Food preparations, not elsewhere classified</i>) Establishments primarily engaged in the processing of shell eggs into liquid, frozen, canned, or dried eggs.	9.8	81	79
2099	Food preparations, n.e.c. (<i>Part of SIC Industry 2099, Food preparations, not elsewhere classified [excludes liquid, frozen, and dried eggs; mincemeat; and sandwich spread, salad dressing base]</i>) Establishments primarily engaged in manufacturing prepared foods and miscellaneous food specialties, not elsewhere classified, such as baked beans (not canned); bakers', confectioners', and household supplies (including chili pepper and powder, desiccated and shredded coconut, marshmallow creme, pie and cake fillings, and powdered sugar); bouillon cubes; brown bread (canned, Boston, and other); instant chocolate and cocoa; ready-to-mix desserts; "health foods;" ice cream cones and wafers; Italian, Spanish, Mexican, and Chinese cakes and other "native" preparations; meat pies; molasses (mixed or blended); peanut products (except peanut candy and salted peanuts); pectin; potato chips; ravioli; spices and meat seasonings; and sweetening sirups, including honey, maple sirup, and sorghum. Establishments primarily engaged in roasting coffee are included in this industry. Establishments primarily engaged in processing eggs are classified in Industry 2090, mincemeat in Industry 2033, and sandwich spread (salad dressing base) in Industry 2035.	47.8	94	91

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1947

MAJOR GROUP 21—TOBACCO MANUFACTURES

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes establishments engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and snuff, and in stemming and redrying tobacco. The manufacture of insecticides from tobacco byproducts is included in Major Group 28.			
211	CIGARETTES			
2111	Cigarettes..... Establishments primarily engaged in manufacturing cigarettes.	27.7	(d)	(d)
212	CIGARS			
2121	Cigars..... Establishments primarily engaged in manufacturing cigars.	47.1	99	100
213	CHEWING AND SMOKING TOBACCO			
2131	Chewing and smoking tobacco (<i>Tobacco—chewing and smoking; and snuff</i>)..... Establishments primarily engaged in manufacturing chewing and smoking tobacco and snuff.	11.1	1 98	86
214	TOBACCO STEMMING AND REDRYING			
2141	Tobacco stemming and redrying..... Establishments primarily engaged in the stemming and redrying of tobacco.	25.9	96	98

MAJOR GROUP 22—TEXTILE MILL PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes establishments engaged in performing any of the following operations, regardless of the type of fiber used: (1) manufacturing yarn, thread, cordage, and twine; (2) manufacturing woven fabric, carpets and rugs, braids, laces, knit fabric, knit garments, and other products from yarn; (3) dyeing and finishing fibers, yarn, and fabric; and (4) coating, waterproofing, and otherwise treating fabric. This classification makes no distinction between the two types of organizations which operate in the textile industry; namely, the "regular" or "inside" mill which purchases materials, produces textiles and related articles within the establishment, and sells the finished products, and the "contract" or "commission" mill which processes materials owned by others. Establishments weaving or knitting fabrics and also manufacturing finished apparel or other fabricated textile products in the same establishment are included in this major group; those manufacturing apparel and other fabricated textile products from fabrics knit or woven elsewhere are classified in Major Group 23. Establishments primarily engaged in the sponging or shrinking of cloth for the trade, or employing home workers for hand-knitting or hand-weaving of textile products, are included in Industry 2399. The rubberizing of fabrics is classified in Major Group 30. Jobbers or converters who do no manufacturing but who assign materials to contract mills for processing are included in certain industries (especially Industries 2211 and 2253) of this major group where they account for a relatively significant part of the total cost of materials or value of shipments.			
221	WOOLEN AND WORSTED MANUFACTURES			
2211	Scouring and combing plants..... Establishments primarily engaged in processing textile fibers to prepare them for spinning. Important processes included in this industry are wool scouring, carbonizing, and blending of wool, and the manufacture of tops on worsted combs from wool, rayon, or other synthetic fibers.	8.7	97	68
2212	Yarn mills, wool, except carpet (<i>Part of SIC Industry 2221, Yarn mills</i>)..... Establishments primarily engaged in spinning, twisting, winding, or spooling yarn, except carpet and rug yarn, on the woolen or worsted system. Both weaving and knitting yarns, made by the woolen, Bradford, or French-system, are included. Establishments primarily engaged in manufacturing wool carpet and rug yarns are classified in Industry 2271.	33.2	90	81

See footnotes at end of table.

MAJOR GROUP 22—TEXTILE MILL PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
221	WOOLEN AND WORSTED MANUFACTURES—Continued			
2213	Woolen and worsted fabrics (<i>SIC Industry 2232, Broad-woven fabric mills, woolen and worsted</i>) Establishments primarily engaged in weaving woolen and worsted fabrics over 12 inches in width. Important products of this industry include woolen and worsted apparel fabrics, household fabrics, and industrial and mechanical fabrics; and woven felts and hair cloth. Establishments primarily engaged in weaving wool carpets and rugs are classified in Industry 2271.	132.3	90	96
2216	Finishing wool textiles (<i>SIC Industry 2262, Dyeing and finishing woolen and worsted goods</i>)—Establishments primarily engaged in dyeing and finishing woven woolen or worsted fabrics, or in dyeing wool, tops, or yarn.	5.8	(3)	4 60
222	YARN AND THREAD MILLS, EXCEPT WOOL			
2222	Yarn throwing mills —Establishments primarily engaged in throwing or twisting filament yarn of silk, rayon, or other synthetic fibers.	14.9	n.a.	5 49
2223	Thread mills —Establishments primarily engaged in manufacturing thread of cotton, silk, rayon, or other synthetic fibers. Important products of this industry include sewing thread for industrial and for home use, and crochet, darning, embroidery, and hand-knitting threads.	14.7	85	89
2224	Yarn mills, cotton system (<i>Part of SIC Industry 2221, Yarn mills</i>)—Establishments primarily engaged in spinning yarn on the cotton system from cotton, wool, silk, rayon, or other synthetic staple fibers. Establishments primarily engaged in twisting, winding, or spooling cotton yarn are also included. Important products include weaving, machine-knitting, hand-knitting, crochet, darning, and embroidery yarns.	92.3	n.a.	5 21
2225	Yarn mills, silk system (<i>Part of SIC Industry 2221, Yarn mills</i>)—Establishments primarily engaged in spinning yarn on the silk system from silk, rayon, or other synthetic staple fibers. Establishments engaged primarily in winding silk, rayon, or other synthetic yarns are also included. Important products include weaving and machine-knitting yarns.	1.8	n.a.	5 86
223	COTTON AND RAYON BROAD-WOVEN FABRICS			
2233	Cotton broad-woven fabrics (<i>Part of SIC Industry 2231, Broad-woven fabric mills—cotton, silk, and synthetic fiber</i>)—Establishments primarily engaged in weaving cotton fabrics over 12 inches in width. This industry also includes establishments primarily engaged in manufacturing tire cords and fabrics, regardless of fiber content. Important products of this industry include duck, osnaburgs, sheetings, print cloth yarn fabrics, napped fabrics, colored yarn fabrics, fine cotton goods, and bedspread, drapery, and upholstery fabrics. Establishments primarily engaged in weaving cotton carpets and rugs are classified in Industry 2273.	357.4	92	96
2234	Rayon and related broad-woven fabrics (<i>Part of SIC Industry 2231, Broad-woven fabric mills—cotton, silk, and synthetic fiber</i>)—Establishments primarily engaged in weaving fabrics over 12 inches in width, except tire fabrics, of silk, rayon, or other synthetic fibers. Establishments primarily engaged in weaving carpets and rugs from these fibers are classified in Industry 2273; and those primarily making tire fabrics, in Industry 2233.	97.6	85	95
224	NARROW FABRIC MILLS			
2241	Narrow fabric mills (<i>Narrow fabrics and other smallwares mills—cotton, wool, silk, and synthetic fiber</i>)—Establishments primarily engaged in weaving or braiding fabrics 12 inches or narrower in width of cotton, wool, silk, rayon, or other synthetic fibers. Establishments primarily engaged in weaving or braiding fabrics 12 inches or narrower in width of elastic yarn are also included in this industry. Important products of this industry include fabric belting (mechanical and apparel), ribbons, tapes, bindings, and gimps; woven labels, hatbands, elastic and nonelastic webbing, covered rubber yarns and threads, and fabric lacings.	27.7	96	98
225	KNITTING MILLS			
2251	Full-fashioned hosiery mills —Establishments primarily engaged in knitting, dyeing, or finishing full-fashioned hosiery.	70.0	94	98

See footnotes at end of table.

MAJOR GROUP 22—TEXTILE MILL PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
225	KNITTING MILLS—Continued			
2252	Seamless hosiery mills Establishments primarily engaged in knitting, dyeing, or finishing seamless (circular-knit) hosiery.	64.8	96	91
2253	Knit outerwear mills Establishments primarily engaged in knitting outerwear, or in manufacturing outerwear from knit fabric produced in the same establishment. Jobbers who do no manufacturing but who assign materials to knit outerwear mills for processing, are also included in this industry. Important products of this industry include sweaters, bathing suits, dresses, and headwear. Establishments primarily engaged in hand-knitting outerwear for the trade are included in this industry. Establishments primarily engaged in manufacturing gloves and mittens are classified in Industry 2255, Group 238, or Group 315, and those manufacturing outerwear from purchased knit fabric in Major Group 23.	34.8	91	82
2254	Knit underwear mills Establishments primarily engaged in knitting underwear and nightwear, or in manufacturing underwear and nightwear from knit fabric produced in the same establishment. Establishments primarily engaged in manufacturing underwear and nightwear from purchased knit fabric are classified in Major Group 23.	40.6	87	70
2255	Knit glove mills Establishments primarily engaged in knitting or crocheting gloves and mittens, or in manufacturing gloves and mittens from knit fabric produced in the same establishment. Establishments primarily engaged in manufacturing gloves and mittens from purchased knit fabric are classified in Group 238.	5.2	92	38
2256	Knit-fabric mills Establishments primarily engaged in knitting tubular or flat fabric (including warp-knit mosquito netting) and in dyeing or finishing knit fabric.	14.2	93	88
2259	Knitting mills, n.e.c. Establishments primarily engaged in knitting articles, not elsewhere classified, such as knit curtains, washcloths, dishcloths, and towels.	1.0	98	89
226	FINISHING TEXTILES, EXCEPT WOOL			
2261	Finishing textiles, except wool (<i>Dyeing and finishing textiles, except woolen and worsted textiles and knit goods</i>) Establishments primarily engaged in bleaching, dyeing, printing, finishing, or otherwise converting fabrics, yarn, thread, or raw stock, other than woolen and worsted. Establishments primarily engaged in dyeing or finishing knit goods are classified in Group 225, and woolen and worsted goods in Industry 2216.	78.0	(3)	40
227	CARPETS AND RUGS			
2271	Wool carpets, rugs, and carpet yarn Establishments primarily engaged in manufacturing carpets and rugs made wholly or in part of woolen or worsted yarn. The industry also includes establishments primarily engaged in spinning woolen or worsted yarns for use in carpets and rugs. Important products of the industry include carpet yarns and Axminster, Wilton, and velvet carpets and rugs.	40.1	(2)	(2)
2273	Carpets and rugs, n.e.c. (<i>Carpets, rugs, and mats from fiber, except wool</i>) Establishments primarily engaged in manufacturing rugs, carpets, art squares, floor matting, and door mats and matting, from fibers other than wool. Materials used include cotton, goat and cattle hair, jute, sisal, rags, twisted paper, grasses, reeds, and coir (cocoa fiber).	7.1	84	86
2274	Hard-surface floor coverings (<i>Linoleum, asphalted-felt-base, and other hard-surface floor coverings, not elsewhere classified</i>) Establishments primarily engaged in manufacturing linoleum, cork carpets, asphalted-felt-base, and other hard-surface floor coverings, not elsewhere classified. Establishments primarily engaged in manufacturing rubber floor covering are classified in Industry 3099, and asphalt floor tile, in Industry 3292.	10.1	94	100
228	HATS (EXCEPT CLOTH AND MILLINERY)			
2281	Fur-felt hats and hat bodies Establishments primarily engaged in manufacturing fur-felt hat bodies from hatters' fur, in manufacturing finished fur-felt hats from hat bodies produced in the same establishment and in manufacturing men's and boys' finished fur-felt hats from purchased hat bodies. Establishments primarily engaged in manufacturing millinery from purchased fur-felt hat bodies are classified in Industry 2351.	13.0	94	97

See footnotes at end of table.

MAJOR GROUP 22—TEXTILE MILL PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by a industries
228	HATS (EXCEPT CLOTH AND MILLINERY)—Continued			
2282	Wool-felt hats and hat bodies Establishments primarily engaged in manufacturing wool-felt hat bodies from raw wool and wool waste, in manufacturing wool-felt hats from hat bodies produced in the same establishment, and in manufacturing men's and boys' finished wool-felt hats from purchased hat bodies. Establishments primarily engaged in manufacturing millinery from purchased wool-felt hat bodies are classified in Industry 2351.	4.5	176	97
2283	Straw hats Establishments primarily engaged in manufacturing straw hat bodies, in manufacturing finished straw hats from hat bodies produced in the same establishment, and in manufacturing men's and boys' finished straw hats from purchased hat bodies. Establishments primarily engaged in manufacturing millinery from purchased straw hat bodies are classified in Industry 2351.	2.4	83	74
2284	Hatters' fur Establishments primarily engaged in producing hatters' fur for use as material in manufacturing fur-felt hat bodies.	1.5	(d)	(d)
229	MISCELLANEOUS TEXTILE GOODS			
2291	Felt goods, n.e.c. (Felt goods, except woven felts and hats) Establishments primarily engaged in manufacturing insulating and automotive felts, under-rug mats, and other felt goods, from wool, hair, and jute, by means of heat, moisture, and pressure, or by the needle-loom process. Establishments primarily engaged in manufacturing woven felts and haircloth are classified in Industry 2213, and those manufacturing felt hats in Group 228.	4.7	195	97
2292	Lace goods Establishments primarily engaged in manufacturing lace-machine products such as levers laces, bobbinet, Nottingham lace (curtain nets, curtains, bedspreads, table covers), and Barmen lace. This industry also includes establishments primarily engaged in dyeing and finishing lace goods. Establishments primarily engaged in manufacturing machine embroideries are classified in Industries 2397 and 2398.	8.6	94	97
2293	Paddings and upholstery filling Establishments primarily engaged in manufacturing batting, padding, wadding, and upholstery filling from curled hair, cotton, moss, hemp tow, flax tow, kapok, and related materials. Establishments primarily engaged in manufacturing excelsior pads and wrappers are classified in Industry 2425.	8.2	96	92
2294	Processed textile waste (Processed waste and recovered fibers) Establishments primarily engaged in processing textile-mill waste for spinning and other uses, and in recovering cotton, wool, rayon, silk, and other fibers from clippings and rags. Establishments primarily engaged in manufacturing oakum are also included in this industry. Establishments primarily producing wiping rags are not included in manufacturing.	5.8	94	91
2295	Coated fabrics, except rubberized (Artificial leather, oilcloth, and other impregnated and coated fabrics, except rubberized) Establishments primarily engaged in manufacturing artificial leather, oilcloth, and other coated and impregnated fabrics, and in the special finishing of textiles such as the waxing of cloth and the varnishing of cambric and buckram. Establishments primarily engaged in manufacturing rubberized fabrics are classified in Industry 3099.	8.7	91	73
2297	Jute, except felt, and linen goods (Includes SIC Industry 2296, Linen goods and 2297, Jute goods—except felt) Establishments primarily engaged in manufacturing flax yarn and thread and fabrics of linen and linen-and-cotton mixtures, and establishments primarily engaged in manufacturing jute yarn and jute goods such as fabrics, bagging, and webbing. Establishments primarily engaged in manufacturing jute felts are classified in Industry 2291, and flax and jute cordage and twine in Industry 2298.	5.3	82	89
2298	Cordage and twine Establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related goods, from hemp, jute, cotton, paper, flax, and other fibers.	16.0	88	86
2299	Textile goods, n.e.c. Establishments primarily engaged in manufacturing textile goods, not elsewhere classified.	2.7	82	64

See footnotes at end of table.

MAJOR GROUP 23—APPAREL AND RELATED PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	<p align="center">The Major Group as a Whole</p> <p>This major group, known as the cutting-up and needle trades, includes establishments producing clothing and related fabricated products by cutting and sewing purchased woven or knit fabric. All types of textiles are utilized, as well as leather, rubberized fabrics, fur, and other materials. This classification makes no distinction between the two types of organizations which operate in the apparel industry; namely, the "regular" or "inside" factory which purchases materials, manufactures clothing and related articles, and sells the finished products, and the "contract" factory which manufactures apparel from materials owned by others.</p> <p>Jobbers who do no manufacturing but who assign materials to contract factories for fabrication are included in certain industries of this major group where they account for a relatively significant part of the total cost of materials and value of shipments. A relatively large number of jobber establishments are included in each of the following industries: 2311, 2321, 2327, 2329, 2331, 2333, 2335, 2336, 2338, 2339, 2341, 2363, 2369, 2384, and 2385. Custom tailors and dressmakers are classified in nonmanufacturing industries.</p>			
231	MEN'S AND BOYS' SUITS AND COATS	146.8	92	97
2311	Men's and boys' suits and coats (<i>Men's, youths', and boys' suits, coats, and overcoats</i>)----- Establishments primarily engaged in manufacturing men's, youths', and boys' suits, coats, and overcoats. Establishments primarily engaged in manufacturing uniforms (military, policemen's, firemen's, etc.) are also included in this industry. Establishments primarily engaged in manufacturing men's work and sports garments are classified in Group 232.	3.6	99	99
2312	Suit and coat findings ----- Establishments primarily engaged in manufacturing suit and coat findings such as coat fronts, interlinings, collar linings, trouser waistbands, and shoulder pads, or in making buttonholes for men's, youths', and boys' coats and suits.			
232	MEN'S AND BOYS' FURNISHINGS			
2321	Men's dress shirts and nightwear (<i>Men's, youths', and boys' shirts—except work shirts; collars, and nightwear</i>)----- Establishments primarily engaged in manufacturing men's, youths', and boys' shirts, collars, and nightwear cut and sewed from purchased woven or knit fabric. Establishments primarily engaged in manufacturing work shirts are classified in Industry 2328. Knitting mills primarily engaged in manufacturing nightwear are classified in Industry 2254.	94.3	92	94
2322	Men's and boys' underwear (<i>Men's, youths', and boys' underwear</i>)----- Establishments primarily engaged in manufacturing men's, youths', and boys' underwear cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing underwear are classified in Industry 2254.	7.3	95	21
2323	Men's and boys' neckwear (<i>Men's, youths', and boys' neckwear</i>)----- Establishments primarily engaged in manufacturing men's, youths', and boys' neckties, scarfs, and mufflers cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing neckties, scarfs, and mufflers are classified in Industry 2253.	10.7	97	93
2325	Men's and boys' cloth hats and caps (<i>Men's, youths', and boys' cloth hats and caps</i>)----- Establishments primarily engaged in manufacturing men's, youths', and boys' hats and caps from purchased knit or woven fabric, such as baseball and other cloth sport hats; chauffeurs', policemen's, and other uniform hats; and miscellaneous cloth hats and caps. Establishments primarily engaged in manufacturing fur felt hats are classified in Industry 2281, wool-felt hats in Industry 2282, and straw hats in Industry 2283. Knitting mills primarily engaged in manufacturing caps are classified in Industry 2253.	5.5	96	91
2326	Hat and cap materials ----- Establishments primarily engaged in manufacturing hat and cap findings, such as cap visors, sweatbands, and trimmings from purchased materials. Establishments primarily engaged in tip printing or stamping are also included in this industry. Establishments primarily engaged in manufacturing hatters' fur are classified in Industry 2284.	1.1	97	99
2327	Separate trousers (<i>Men's, youths', and boys' separate trousers</i>)----- Establishments primarily engaged in manufacturing men's, youths', and boys' separate trousers. Establishments primarily engaged in manufacturing work pants are classified in Industry 2329.	48.3	84	70

See footnotes at end of table.

MAJOR GROUP 23—APPAREL AND RELATED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
232	MEN'S AND BOYS' FURNISHINGS—Continued			
2328	Work shirts ----- Establishments primarily engaged in manufacturing work shirts.	12.1	77	67
2329	Men's and boys' clothing, n.e.c. (Men's, youths', and boys' work, sport, and other clothing, not elsewhere classified) ----- Establishments primarily engaged in manufacturing men's, youths', and boys' work, sport and other clothing, not elsewhere classified. Important products of this industry include overalls, work pants, industrial garments, washable service apparel, wash suits, oiled-fabric work garments, mackinaws, lumberjackets, blanket-lined coats, ski and snow suits, and hunting and riding garments. Establishments primarily engaged in manufacturing separate trousers are classified in Industry 2327, and leather and sheep-lined garments in Industry 2386. Knitting mills primarily engaged in manufacturing outerwear are classified in Industry 2253.	74.1	81	86
233	WOMEN'S AND MISSES' OUTERWEAR			
2331	Blouses and waists (Women's and misses' blouses and waists) ----- Establishments engaged primarily in manufacturing women's and misses' blouses, waists, and shirts from textile fabrics of all types.	32.8	93	87
2333	Dresses, unit price (Women's and misses' dresses) ----- Establishments primarily engaged in manufacturing women's and misses' dresses and ensemble dresses. The garments manufactured by establishments classified in this industry are usually sold by the piece. Establishments primarily engaged in manufacturing aprons, smocks, hoovers, and house dresses, usually sold by the dozen, are classified in Industry 2334.	133.3	95	97
2334	Dresses, dozen price (Household apparel) ----- Establishments primarily engaged in manufacturing women's and misses' dozen price dresses and household apparel, chiefly of washable fabrics. Important products of this industry include aprons, smocks, hoovers, house dresses, and nurses' and maids' uniforms.	48.7	89	96
2335	Women's suits and coats (Part of SIC Industry 2337, Women's and misses' suits, coats—except fur coats, and skirts) ----- Establishments primarily engaged in manufacturing women's and misses' suits, ensemble suits, and coats other than fur. Establishments primarily engaged in manufacturing fur garments are classified in Industry 2371, and knitting mills primarily engaged in manufacturing outerwear in Industry 2253.	74.3	95	94
2336	Women's skirts (Part of SIC Industry 2337, Women's and misses' suits, coats—except fur coats, and skirts) ----- Establishments primarily engaged in manufacturing women's and misses' skirts from all fabrics.	8.3	77	70
2338	Women's neckwear and scarfs ----- Establishments primarily engaged in manufacturing women's neckwear and scarfs, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing neckwear or scarfs are classified in Industry 2253.	2.8	96	96
2339	Women's outerwear, n.e.c. (Women's and misses' outerwear, not elsewhere classified) ----- Establishments primarily engaged in manufacturing women's and misses' outerwear, not elsewhere classified, such as bathing suits, beachwear, slacks, riding habits, and ski suits cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing outerwear are classified in Industry 2253.	13.3	66	60
234	WOMEN'S AND CHILDREN'S UNDERGARMENTS			
2341	Women's and children's underwear (Women's, misses', children's, and infants' underwear and nightwear) ----- Establishments primarily engaged in manufacturing women's, misses', children's, and infants' underwear and nightwear cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing underwear and nightwear are classified in Industry 2254.	57.3	95	78
2342	Corsets and allied garments ----- Establishments primarily engaged in manufacturing corsets and corset accessories, brasieres, girdles, foundation garments, and similar body supporting garments. Establishments engaged in manufacturing surgical and orthopedic appliances are classified in Industry 3842.	37.3	95	97

See footnotes at end of table.

MAJOR GROUP 23—APPAREL AND RELATED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
235	MILLINERY			
2351	Millinery Establishments primarily engaged in manufacturing women's, misses', children's, and infants' trimmed hats made from felt or straw hat bodies and purchased millinery materials. Establishments primarily engaged in manufacturing fur-felt and wool-felt hat bodies are classified in Group 228, and millinery braid and trimming in Industry 2396.	20.9	99	98
236	CHILDREN'S OUTERWEAR			
2361	Children's dresses (<i>Children's and infants' dresses</i>) Establishments primarily engaged in manufacturing children's and infants' dresses, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing dresses are classified in Industry 2253. Establishments primarily manufacturing children's and infants' blouses are also included within this industry.	22.4	93	91
2363	Children's coats (<i>Children's and infants' coats</i>) Establishments primarily engaged in manufacturing children's and infants' coats, coat and legging sets, and snow suits, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing outerwear are classified in Industry 2253.	12.4	90	87
2369	Children's outerwear, n.e.c. (<i>Children's and infants' outerwear, not elsewhere classified</i>) Establishments primarily engaged in manufacturing children's and infants' outerwear, not elsewhere classified, such as playsuits, overalls, slacks, beachwear, rompers, and polo, basque and "T-shirts", cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing outerwear are classified in Industry 2253.	13.3	77	68
237	FUR GOODS			
2371	Fur goods Establishments primarily engaged in manufacturing fur coats and other garments, accessories, and trimmings made of fur. Establishments primarily engaged in manufacturing sheep-lined clothing are classified in Industry 2386; those engaged in making women's fur-trimmed coats, in Industry 2335; and those engaged in the dyeing and dressing of furs, in Industry 3992.	16.2	100	100
238	MISCELLANEOUS APPAREL AND ACCESSORIES			
2381	Fabric and combination dress gloves (<i>Dress and semidress gloves and mittens—fabric, fabric and leather combined</i>) Establishments primarily engaged in manufacturing dress and semidress gloves and mittens, cut and sewed from purchased woven or knit fabric, or these materials combined with leather. Knitting mills primarily engaged in manufacturing gloves and mittens are classified in Industry 2255; establishments primarily engaged in manufacturing leather gloves in Group 315; and those manufacturing rubber gloves in Industry 3099.	5.1	95	57
2382	Fabric and combination work gloves (<i>Work gloves and mittens—fabric, fabric and leather combined</i>) Establishments primarily engaged in manufacturing work gloves and mittens, cut and sewed from purchased woven or knit fabric, or these materials combined with leather. Knitting mills primarily engaged in manufacturing gloves and mittens are classified in Industry 2255; establishments primarily engaged in manufacturing leather gloves in Group 315; and those manufacturing rubber gloves in Industry 3099.	11.0	94	96
2383	Suspenders and garters (<i>Suspenders, garters, and related products</i>) Establishments primarily engaged in manufacturing suspenders, arm bands, garters, hose supporters, and related products. Establishments primarily engaged in manufacturing corsets and allied garments are classified in Industry 2342.	1.7	74	54
2384	Robes and dressing gowns Establishments primarily engaged in manufacturing men's and women's bathrobes, lounging robes, and dressing gowns.	10.9	89	82
2385	Waterproof outer garments (<i>Raincoats and other waterproof outer garments</i>) Establishments primarily engaged in manufacturing raincoats from purchased rubberized fabrics and other waterproof outer garments made from such material as pliofilm and cellophane. Establishments primarily engaged in manufacturing oiled fabric work garments are classified in Industry 2329, and those manufacturing rubber garments made from rubberized fabrics produced in the same establishment are classified in Industry 3099.	8.3	84	77

See footnotes at end of table.

MAJOR GROUP 23—APPAREL AND RELATED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
238	MISCELLANEOUS APPAREL AND ACCESSORIES—Continued			
2386	Leather and sheep-lined clothing ----- Establishments primarily engaged in manufacturing leather and sheep-lined garments. Establishments primarily engaged in manufacturing leather gloves and mittens are classified in Group 315, and fur garments in Industry 2371.	4.3	78	80
2387	Belts ----- Establishments primarily engaged in manufacturing men's and women's apparel belts, regardless of material.	9.2	90	95
2388	Handkerchiefs ----- Establishments primarily engaged in manufacturing handkerchiefs. Establishments primarily engaged in manufacturing embroidered handkerchiefs are classified in Industries 2397 and 2398; and lace handkerchiefs, in Industry 2292.	4.6	98	95
2389	Apparel, n.e.c. ----- Establishments primarily engaged in manufacturing apparel, not elsewhere classified, such as academic caps and gowns, vestments, and theatrical costumes.	2.2	96	86
239	MISCELLANEOUS FABRICATED TEXTILES			
2391	Curtains and draperies ----- Establishments primarily engaged in manufacturing curtains and draperies from purchased fabric.	8.0	97	90
2392	Housefurnishings, n.e.c. (Housefurnishings, except curtains and draperies) ----- Establishments primarily engaged in manufacturing housefurnishings from purchased fabric. Important products of this industry include sheets, pillowcases, napkins, table cloths, comfortables, blankets, bedspreads, pillows, laundry bags, mops and dusters, and slip covers. Establishments primarily engaged in manufacturing curtains and draperies are classified in Industry 2391.	40.2	93	88
2393	Textile bags ----- Establishments primarily engaged in manufacturing cotton, burlap, and other textile bags from purchased fabric.	13.9	93	98
2394	Canvas products ----- Establishments primarily engaged in manufacturing awnings, tents, sails, canvas covers, tarpaulins, bags, and canopies from purchased canvas. Establishments primarily engaged in manufacturing canvas products, mainly awnings, for sale at retail, are included in this industry.	10.6	91	93
2395	Tucking, pleating, and hemstitching (Pleating, stitching, and tucking for the trade) ----- Establishments primarily engaged in pleating, hemstitching, tucking, quilting, and appliqueing, and making button holes for the trade. Establishments performing these operations for individual consumers are classified in service industries. Establishments primarily engaged in manufacturing trimmings and art needle work are classified in Industry 2396.	5.9	96	87
2396	Trimmings and art goods (Trimmings, stamped art goods, and art needlework) ----- Establishments primarily engaged in manufacturing trimmings for millinery and other uses, stamped art goods, and art needlework.	15.0	94	96
2397	Schiffli-machine embroideries ----- Establishments primarily engaged in manufacturing Schiffli-machine embroideries, and burnt-out laces.	5.7	98	96
2398	Embroideries, except Schiffli-machine ----- Establishments primarily engaged in manufacturing Swiss loom and other machine-made or hand-made embroideries, except Schiffli-machine embroideries. Establishments primarily engaged in making Schiffli-machine embroideries are classified in Industry 2397.	9.8	97	96
2399	Fabricated textile products, n.e.c. ----- Establishments primarily engaged in manufacturing fabricated textile products, not elsewhere classified, such as automobile seat covers, banners, flags, and pennants. Establishments primarily engaged in the sponging or shrinking of cloth for the trade, or in employing home workers for hand-knitting or hand-weaving of textile products, are also included in this industry.	18.5	88	87

See footnotes at end of table.

MAJOR GROUP 24—LUMBER AND WOOD PRODUCTS, EXCEPT FURNITURE

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	<p align="center">The Major Group as a Whole</p> <p>This major group includes sawmills, veneer mills, lath mills, shingle mills, cooperage-stock mills, planing mills, and plywood mills engaged in producing lumber and wood basic materials; and establishments engaged in manufacturing finished articles made entirely or mainly of wood or wood substitutes. Certain types of establishments producing wood products are classified elsewhere. For example, furniture and office and store fixtures are classified in Major Group 25; pianos, musical instruments, toys and playground equipment, and caskets and coffins in Major Group 39. Woodworking in connection with construction, in the nature of reconditioning and repair, or performed to individual order, is classified in nonmanufacturing industries. Logging camps and logging contractors (Standard Industrial Classification Industry 2411) are excluded from the scope of the 1947 census. No establishments were classified in Standard Industrial Classification Industry 2429 in 1947.</p>			
242	LUMBER AND TIMBER BASIC PRODUCTS			
2421	Sawmills and planing mills, general Establishments primarily engaged in sawing rough lumber and timber from logs or bolts, or resawing cants, flitches, or lumber into smaller dimensions; planing mills combined with sawmills; and separately operated planing mills which are engaged primarily in producing surfaced lumber and standard workings or patterns of lumber. This industry also includes establishments primarily engaged in sawing lath, railroad ties, and box shooks from logs or bolts. Establishments primarily engaged in manufacturing box shooks or boxes from purchased lumber are classified in Industry 2444, and sash, doors, window and door frames, and other fabricated millwork from purchased lumber in Industry 2431.	380.5	94	98
2422	Veneer mills Establishments primarily engaged in producing veneer of all types and grades. Establishments primarily engaged in the production of veneer which is used in the same establishment for the manufacture of products such as plywood are classified in Industry 2432, fruit and vegetable baskets in Industry 2441, wooden boxes in Industry 2444, and cigar boxes in Industry 2443.	10.5	92	83
2423	Shingle mills Establishments primarily engaged in producing wood shingles, including shake operations.	2.4	100	86
2424	Cooperage stock mills Establishments primarily engaged in producing cooperage stock, including staves, heading and hoops for tight or slack cooperage, whether produced by sawing or splitting. Establishments primarily engaged in manufacturing barrels and other coopered products from stock produced in the same establishment are classified in Industry 2445.	12.3	96	92
2425	Excelsior mills Establishments primarily engaged in manufacturing excelsior, wood-wool, and excelsior pads and wrappers.	1.2	100	97
243	MILLWORK AND RELATED PRODUCTS			
2431	Millwork plants Establishments primarily engaged in manufacturing sash, windows, doors, window and door frames, moldings, mantels, panel work, porch work, stairways, wooden pipe, conduit, tanks and vats, and similar fabricated millwork. Establishments primarily engaged in producing dimension stock, surfaced lumber, and standard workings or patterns of lumber, such as ceiling, partition, siding, matched and shiplapped lumber, and flooring, are classified in Industry 2421. Establishments primarily engaged in manufacturing storm sash and combination window and door screens are classified in Industry 2561.	57.6	87	93
2432	Plywood plants Establishments primarily engaged in manufacturing commercial (hardwood and softwood) plywood, including technical and industrial grades from veneer produced in the same establishment or from purchased veneer. Establishments primarily engaged in manufacturing other grades and types such as fancy and figured, container, and nonwood face plywood are also included in this industry. Establishments producing plywood which is used in the same establishment in the manufacture of end products, such as doors, are classified in Industry 2431, and wood boxes, in Industry 2444.	26.5	94	96

See footnotes at end of table.

MAJOR GROUP 24—LUMBER AND WOOD PRODUCTS, EXCEPT FURNITURE—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
243	MILLWORK AND RELATED PRODUCTS—Continued			
2433	Prefabricated wood products (<i>Prefabricated wooden buildings and structural members</i>)----- Establishments primarily engaged in manufacturing prefabricated wooden buildings, or in producing laminated or fabricated trusses, arches, and other structural members of lumber. Establishments primarily manufacturing prefabricated metal buildings and components are classified in Industry 3441. Contractors engaged in on-the-site construction are not classified as manufacturing establishments.	10.2	92	96
244	WOODEN CONTAINERS			
2441	Fruit and vegetable baskets ----- Establishments primarily engaged in manufacturing till baskets, berry cups, climax baskets, round stave baskets, vegetable hampers, and splint or market baskets made primarily of veneer and splint for shipping and marketing fruits and vegetables.	9.1	91	88
2442	Rattan and willow ware, n.e.c. (<i>Rattan and willow ware, except furniture and fruit and vegetable baskets</i>)----- Establishments primarily engaged in manufacturing articles of rattan, reed, splint, veneer, and willow, such as laundry hampers, clothes baskets, market baskets (except fruit and vegetable baskets—Industry 2441), and small articles such as trays, coasters, table pads, and willow bottle and demijohn covers. Establishments primarily engaged in manufacturing reed and rattan furniture are classified in Industry 2513.	1.1	89	93
2443	Cigar boxes ----- Establishments primarily engaged in manufacturing cigar boxes of wood, or partly of wood, in which cigars are packed for sale. Establishments primarily engaged in manufacturing paper cigar boxes are classified in Industry 2671.	1.9	100	85
2444	Wooden boxes, except cigar boxes ----- Establishments primarily engaged in manufacturing wooden boxes (nailed or wirebound, plain or fabric covered), crates, cases, wooden shipping drums, and carrier trays. Establishments primarily engaged in manufacturing box shoos and wooden trunk slats from purchased lumber are also included in this industry, but establishments primarily engaged in manufacturing cigar boxes are classified in Industry 2443, fruit and vegetable baskets in Industry 2441, and caskets and coffins in Industry 3988.	47.8	96	85
2445	Cooperage ----- Establishments primarily engaged in manufacturing barrels, kegs, tubs, hogsheads, pails, and other containers made of staves, except fruit and vegetable baskets (Industry 2441). Establishments primarily engaged in manufacturing cooperage stock are classified in Industry 2424.	9.2	96	97
249	MISCELLANEOUS WOOD PRODUCTS			
2491	Wood preserving ----- Establishments primarily engaged in treating wood (sawed or planed in other establishments) with creosote or other preservatives to prevent decay and to protect against fire and insects. Establishments primarily engaged in manufacturing wood products which they may also treat with preservatives are not included in this industry.	16.2	(^d)	(^d)
2492	Lasts and related products ----- Establishments primarily engaged in manufacturing lasts for boots and shoes, last sole patterns, shoe trees and stretchers, and display forms for boots and shoes, regardless of the material used.	2.0	(^d)	(^d)
2493	Mirror and picture frames ----- Establishments primarily engaged in manufacturing finished picture-frame moldings; in manufacturing frames for mirrors, pictures, photographs, and medallions; and in framing pictures for the trade. Establishments primarily engaged in manufacturing mirror glass are classified in Industry 3231, and the framing of pictures to individual order in nonmanufacturing industries.	3.8	89	92
2499	Wood products, n.e.c. ----- Establishments primarily engaged in turning and shaping wood and manufacturing miscellaneous wood products, not elsewhere classified, such as bakers' wooden equipment, battery separators, carvings, clothespins, cloth-winding and cable reels, dishes and other household and kitchen woodenware, flag poles, wood-flour, furniture turnings, wooden handles, garment hangers, ladders, oars, rolling pins, scaffolds, tailors' pressing blocks, textile machinery turnings, toilet seats (regardless of materials), toothpicks, trays, in-laid veneer work, vehicle stock, and washboards (wooden and part wooden).	43.5	91	94

See footnotes at end of table.

MAJOR GROUP 25—FURNITURE AND FIXTURES

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole			
	This major group includes establishments engaged in manufacturing household, office, public-building, professional, and restaurant furniture, office and store fixtures, and window and door screens and shades, and venetian blinds, regardless of the materials used. Establishments primarily engaged in manufacturing beauty and barber shop furniture, except hydraulic chairs (Standard Industrial Classification Industry 3991) are included in this major group. Establishments primarily engaged in the production of millwork are classified in Industry 2431, and woodworking to individual order or in the nature of reconditioning and repair in nonmanufacturing industries.			
251	HOUSEHOLD FURNITURE			
2511	Wood house furniture, except upholstered Establishments primarily engaged in manufacturing wood household furniture commonly used in dwellings. This industry also includes wooden cases and cabinets for radios and sewing machines, kitchen cabinets, camp furniture, nursery furniture, and smoking stands. Establishments primarily engaged in manufacturing upholstered furniture are classified in Industry 2512, and reed and rattan furniture in Industry 2513.	132.7	93	94
2512	Household furniture, upholstered (<i>Includes SIC Industry 2512, Wood household, upholstered; and upholstered metal household furniture from 2514, Metal household furniture</i>) Establishments primarily engaged in manufacturing upholstered furniture on wood and metal frames, or manufacturing wood frames for upholstered furniture. Establishments primarily engaged in reupholstering furniture, or upholstering frames to individual order are classified in nonmanufacturing industries.	44.8	92	83
2513	Reed and rattan furniture Establishments primarily engaged in manufacturing reed, rattan, fiber, willow, and other wicker furniture, whether padded or plain.	.8	79	62
2514	Metal house furniture, except upholstered (<i>Part of SIC Industry 2514, Metal household furniture [excludes upholstered metal household furniture]</i>) Establishments primarily engaged in manufacturing metal household furniture, except upholstered, of a type commonly used in dwellings.	19.5	82	71
2515	Mattresses and bedsprings Establishments primarily engaged in manufacturing mattresses (including foam-rubber and box-spring mattresses); assembled wire springs (fabric, coil, or box) for use on beds, couches, and cots; and spring cushions. Establishments primarily engaged in manufacturing individual wire springs are classified in Industry 3489.	30.3	76	93
2519	Household furniture, n.e.c. Establishments primarily engaged in manufacturing household furniture except wood, reed, rattan, and metal. Important products of this industry include glass, plastic, and paperboard furniture.	.9	86	80
252	OFFICE FURNITURE			
2521	Wood office furniture Establishments primarily engaged in manufacturing wood office furniture, whether padded, upholstered, or plain. Establishments producing metal office furniture are classified in Industry 2522, and office fixtures in Industry 2541.	6.6	93	81
2522	Metal office furniture Establishments primarily engaged in manufacturing metal office furniture, whether padded, upholstered, or plain. Establishments primarily engaged in manufacturing safes and vaults are classified in Industry 3492, wood office furniture in Industry 2521, and office fixtures in Industry 2541.	14.7	87	92
253	PUBLIC AND PROFESSIONAL FURNITURE			
2531	Public-building furniture (<i>Public-building and related furniture</i>) Establishments primarily engaged in manufacturing furniture for schools, theaters, assembly halls, churches, and libraries, and in manufacturing seats for public conveyances. Establishments primarily engaged in manufacturing stone furniture are classified in Industry 3281, and concrete furniture in Industry 3271.	8.9	75	75

See footnotes at end of table.

MAJOR GROUP 25—FURNITURE AND FIXTURES—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
253	PUBLIC AND PROFESSIONAL FURNITURE—Continued			
2532	Professional furniture Establishments primarily engaged in manufacturing furniture especially designed for laboratory, hospital, and other professional uses, such as laboratory work tables, operating tables, and hospital beds. Establishments primarily engaged in manufacturing furniture such as manicure tables, dresserettes, etc., especially designed for use in beauty and barber shops are classified in this industry; but those primarily manufacturing equipment such as hydraulic chairs, hair dryers, permanent waving equipment, etc., are classified in Industry 3991.	5.6	65	64
254	PARTITIONS AND FIXTURES			
2541	Partitions and fixtures (<i>Partitions, shelving, lockers, and office and store fixtures</i>) Establishments primarily engaged in manufacturing from wood, metal, or other materials, prefabricated partitions, shelving, cabinets, show and display cases, office and store fixtures, and related fabricated products including bar fixtures, telephone booths, butchers' fixtures, lockers, display racks and stands, and store and lunchroom window-backs. Establishments primarily engaged in manufacturing refrigerated cabinets, show cases, and display cases, are classified in Industry 3585, and safes and vaults in Industry 3492.	27.7	88	89
256	SCREENS, SHADES, AND BLINDS			
2561	Window and door screens (<i>Window and door screens and weather strip</i>) Establishments primarily engaged in manufacturing window and door screens, (also storm sash and combination screen and storm sash and doors), and weatherstrip, regardless of the materials used. Establishments primarily engaged in manufacturing wire screening are classified in Industry 3489.	9.5	90	73
2562	Window shades Establishments primarily engaged in manufacturing complete window shades, window-shade rollers and fittings, and curtain rods and fixtures, regardless of the materials used.	6.8	69	92
2563	Venetian blinds Establishments primarily engaged in manufacturing venetian blinds regardless of the materials used. Establishments primarily engaged in manufacturing porch shades (except canvas shades and awnings—Industry 2394) are also included in this industry.	9.7	96	92
259	MISCELLANEOUS FURNITURE AND FIXTURES			
2591	Restaurant furniture Establishments primarily engaged in manufacturing furniture especially designed for use in restaurants.	3.4	87	69
2599	Furniture and fixtures, n.e.c. Establishments primarily engaged in manufacturing furniture and fixtures, not elsewhere classified.	.7	89	51

MAJOR GROUP 26—PAPER AND ALLIED PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes the manufacture of pulp primarily from wood, and from rags and other fibers; the conversion of these pulps into paper or board; and the manufacture of paper and paperboard into converted paper products such as coated paper, paper bags, paper boxes, cards, and envelopes. Certain types of converted paper products are classified elsewhere, such as abrasive paper in Industry 3291, carbon paper in Industry 3955, and photosensitized and blueprint paper in Industry 3861.			

See footnotes at end of table.

MAJOR GROUP 26—PAPER AND ALLIED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
261	PULP, PAPER, AND PAPERBOARD			
2611	Pulp mills Establishments primarily engaged in manufacturing pulp from wood or from other materials such as rags, linter, waste paper, and straw.	50.3	99	100
2612	Paper and board mills (<i>Includes SIC Industry 2612, Paper and paperboard mills, except building-paper and building-board mills; and 2613, Building-paper and building-board mills</i>). Establishments primarily engaged in manufacturing paper, paperboard, building paper and building board from wood pulp and other fibers on a standard or modified paper machine.	148.1	100	100
264	PAPER COATING AND GLAZING			
2641	Paper coating and glazing Establishments primarily engaged in manufacturing coated and glazed paper. Chief products of this industry include coated-book (coated off the paper machine), waxed and gummed paper, and waterproof wrapping paper. Establishments primarily engaged in manufacturing paper machine coated paper are classified in Industry 2612, carbon paper in Industry 3955, and photographic and blueprint paper in Industry 3861.	18.1	88	92
265	ENVELOPES			
2651	Envelopes Establishments primarily engaged in manufacturing envelopes of any description (except stationery envelopes) from paper. Establishments primarily engaged in manufacturing papeteries (boxed stationery) are classified in Industry 2699.	13.8	92	95
266	PAPER BAGS			
2661	Paper bags Establishments primarily engaged in manufacturing paper bags of all types, such as grocers, and variety bags and shipping sacks, from paper and similar materials.	22.3	96	86
267	PAPERBOARD CONTAINERS AND BOXES			
2671	Paperboard boxes (<i>Paperboard boxes: folded, set-up, and corrugated</i>). Establishments primarily engaged in manufacturing paperboard containers or boxes from paperboard or fiber stock. Important products of this industry are folding paper boxes and cartons, set-up boxes, and corrugated and solid fiber shipping containers from paperboard or fiber stock.	109.8	97	98
2674	Fiber cans, tubes, drums, etc. (<i>Fiber cans, tubes, drums, and similar products</i>). Establishments primarily engaged in manufacturing fiber cans, cones, cores, mailing cases, ribbon-blocks, spools, tubes, drums, and similar products from paperboard.	9.4	97	93
269	PULP GOODS AND MISCELLANEOUS PAPER PRODUCTS			
2691	Die-cut paper and board (<i>Die-cut paper and paperboard; and cardboard</i>). Establishments primarily engaged in die-cutting paper and paperboard and in manufacturing cardboard by laminating, lining, and surface-coating paperboard. Important products of this industry are bottle caps and tops; index, library, and guide cards; photograph folders, mats, and mounts; and stencil cards for addressing machines.	8.5	90	84
2693	Wallpaper Establishments primarily engaged in designing, printing, and embossing paper for interior walls and ceilings.	5.5	98	100
2694	Pulp goods, pressed and molded Establishments primarily engaged in manufacturing all kinds of pressed and molded pulp goods, such as pulp plates and utensils, and papier-maché articles other than statuary and art goods. Establishments primarily engaged in manufacturing plates and utensils from paperboard are classified in Industry 2699.	1.7	95	86
2699	Converted paper products, n.e.c. Establishments primarily engaged in manufacturing miscellaneous converted paper products, not elsewhere classified, such as toilet paper, facial tissues (handkerchiefs), table napkins, towels, crepe paper, laminated wallboard, and tile board having a presswood base.	62.4	92	87

See footnotes at end of table.

MAJOR GROUP 27—PRINTING AND PUBLISHING

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole			
	This major group includes establishments engaged in printing, publishing, and lithographing; bookbinding, paper ruling, and manufacturing blankbooks and loose-leaf devices; and those performing services for the printing trades such as typesetting, photo engraving, and electrotyping. This group includes all publishers regardless of whether or not they do their own printing.			
271	NEWSPAPERS			
2711	Newspapers Establishments primarily engaged in publishing newspapers, or in publishing and printing newspapers. These establishments carry on the various operations necessary for issuing newspapers, including the gathering of news and the preparation of editorials and advertisements, but may or may not perform their own printing. Job printing is frequently carried on by establishments engaged in publishing and printing newspapers, but even though the job printing may be of major importance, such establishments are included in this industry. Establishments not engaged in publishing newspapers, but which print or lithograph newspapers for publishers, are classified in Industry 2751 or 2761.	234.4	94	100
272	PERIODICALS			
2721	Periodicals Establishments primarily engaged in publishing periodicals or in preparing, publishing, and printing periodicals. These establishments carry on the various operations necessary for issuing periodicals, but may or may not perform their own printing. Establishments not engaged in publishing periodicals, but which print or lithograph periodicals for publishers are classified in Industry 2751 or 2761.	68.8	94	98
273	BOOKS			
2731	Books, publishing and printing (<i>Books: publishing, publishing and printing</i>) Establishments primarily engaged in publishing only, or in publishing and printing books and pamphlets. Establishments primarily engaged in printing, or in printing and binding (but not publishing) books and pamphlets are classified in Industry 2732.	39.9	92	93
2732	Book printing Establishments primarily engaged in printing only or in printing and binding books and pamphlets, but not engaged in publishing. Establishments primarily engaged in publishing, or in publishing and printing books and pamphlets are classified in Industry 2731.	11.0	75	42
274	MISCELLANEOUS PUBLISHING			
2741	Miscellaneous publishing Establishments primarily engaged in publishing such products as maps, atlases, sheet music, and directories, or engaged in miscellaneous publishing activities, not elsewhere classified, whether or not engaged in printing. Establishments primarily engaged in printing such products and not engaged in publishing are classified in Industry 2751 or 2761.	12.0	93	78
275	COMMERCIAL PRINTING			
2751	Commercial printing Establishments primarily engaged in commercial or job printing. This industry includes general printing shops as well as shops specializing in printing newspapers and periodicals for others, and those which specialize in gravure, rotogravure, and rotary photo-gravure printing. Establishments primarily engaged in printing books (without publishing) are classified in Industry 2732, and greeting cards in Industry 2771. Establishments primarily engaged in printing from lithographic plates are classified in Industry 2761.	193.4	86	85
276	LITHOGRAPHING			
2761	Lithographing Establishments primarily engaged in preparing lithographic stones or metal lithographic plates, and in printing from such media. The greater part of the work in this industry is performed on a job or custom basis, but in some cases lithographed calendars, commercial forms, maps, posters, decalcomanias, etc., are made for sale. Offset printing, photo-offset printing, and photo-lithographing are also included in this industry. Establishments primarily engaged in lithographing books and pamphlets (without publishing) are classified in Industry 2732, and greeting cards in Industry 2771.	52.2	74	77
277	GREETING CARDS			
2771	Greeting cards Establishments primarily engaged in designing only, manufacturing only, or designing and manufacturing greeting cards for all occasions. These products may be printed, lithographed, etched, or otherwise processed.	18.1	92	87

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1947

MAJOR GROUP 27—PRINTING AND PUBLISHING—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
278	BOOKBINDING AND RELATED INDUSTRIES			
2781	Bookbinding Establishments engaged in edition, trade, job, and library bookbinding. Establishments primarily engaged in printing and binding books for publishers are classified in Industry 2732.	22.2	84	87
2782	Blankbook and paper ruling Establishments primarily engaged in manufacturing blankbooks such as ledgers, account books, and composition books; salesbooks; receipt pads; check books; inventory and similar blankbooks; and in ruling paper.	8.8	81	67
2783	Loose-leaf binders and devices (<i>Library and loose-leaf binder manufacturing</i>) Establishments primarily engaged in manufacturing loose-leaf binders and devices, including library binders.	8.1	75	83
2789	Miscellaneous bookbinding work (<i>Miscellaneous work related to bookbinding</i>) Establishments primarily engaged in book or paper bronzing, gilding, and edging; in map and sample mounting; and other services related to bookbinding.	3.4	87	79
279	PRINTING TRADES SERVICE INDUSTRIES			
2791	Typesetting Establishments primarily engaged in machine and hand typesetting for the trade and in advertising typography.	11.5	94	87
2792	Engraving and plate printing Establishments primarily engaged in engraving and etching steel and copper plates; in using these plates to print stationery, visiting and other cards, invitations, announcements, security certificates, maps, etc.; and in making woodcuts for use in printing illustrations, posters, etc. Engraving for purposes other than printing is classified in Industry 3467.	7.7	92	80
2793	Photoengraving Establishments primarily engaged in preparing photoengraved plates (halftones and linecuts). These establishments do not, as a rule, print from the plates which they make, but prepare them for use by others.	16.7	96	95
2794	Electrotyping and stereotyping Establishments primarily engaged in preparing electrotype and stereotype plates. These establishments do not, as a rule, print from the plates they make, but prepare them for use by others.	7.2	92	86

MAJOR GROUP 28—CHEMICALS AND ALLIED PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	<p>The Major Group as a Whole</p> <p>This major group includes establishments producing basic chemicals, and establishments manufacturing products by predominantly chemical processes. Establishments classified in this major group manufacture three classes of products: (1) basic chemicals such as acids, alkalies, salts, and organic chemicals; (2) chemical products to be used in further manufacture such as synthetic fibers, plastics materials, crude animal and vegetable oils, dry colors, and pigments; and (3) finished chemical products to be used for ultimate consumption such as drugs, cosmetics, and soaps; or to be used as materials or supplies in other industries such as paints, fertilizers, and explosives. The mining of natural rock salt is classified in mining industries. Establishments primarily engaged in manufacturing nonferrous metals and high percentage ferro-alloys are classified in Major Group 33, silicon carbide in Industry 3291, baking powder, other leavening compounds, and starches in Major Group 20, and embalming fluids and artists' colors in Major Group 39. Establishments primarily engaged in packaging, repackaging, and bottling of purchased chemical products are classified in trade industries.</p>			

See footnotes at end of table.

MAJOR GROUP 28—CHEMICALS AND ALLIED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
281	INDUSTRIAL INORGANIC CHEMICALS			
2812	Alkalies and chlorine Establishments primarily engaged in manufacturing sodium hydroxide (caustic soda), potassium hydroxide (caustic potash), potassium and sodium carbonates, sodium bicarbonate, sal soda, soda ash, and chlorine. Establishments primarily engaged in manufacturing ammonium compounds are classified in Industry 2819.	19.9	81	85
2819	Inorganic chemicals, n.e.c. (<i>Includes SIC Industry 2811, Sulphuric acid; and 2819, Industrial inorganic chemicals, not elsewhere classified</i>) Establishments primarily engaged in manufacturing industrial inorganic chemicals, not elsewhere classified. Important products of this industry include inorganic acids such as boric, hydrochloric, hydrofluoric, nitric, phosphoric and sulfuric; inorganic salts of sodium, potassium, aluminum, calcium, chromium, magnesium, mercury, nickel, silver, and tin; inorganic compounds such as alums, calcium carbide, sodium silicate, ammonium compounds, and anhydrous ammonia; fertilizer materials such as muriate and sulfate of potash; and elemental bromine and iodine. Establishments primarily engaged in manufacturing alkalies and chlorine are classified in Industry 2812, inorganic paint pigments in Industry 2852, and medicinal grades of inorganic chemicals in Industry 2833.	45.5	87	80
282	INDUSTRIAL ORGANIC CHEMICALS			
2821	Cyclic (coal-tar) crudes Establishments primarily engaged in manufacturing crudes from coal-tar. Such crudes include (1) light oils and light-oil products such as benzene and toluene; (2) coal-tar acids such as cresols and cresylic acid; and (3) products of medium and heavy oil such as creosote oil, naphthalene, anthracene, and their higher homologues, and tar. Establishments primarily engaged in manufacturing coal-tar crudes in byproduct coke ovens are classified in Industry 2932, and petroleum refineries which produce such products in Industry 2911.	2.0	85	78
2823	Plastics materials Establishments primarily engaged in manufacturing plastics materials in the form of sheets, rods, tubes, granules, powders, or liquids for use in further manufacturing. Important products of this industry include: (1) condensation plastics such as alkyd, phenolic, and urea resins; (2) polymerization plastics, except fibers, such as polyvinyl alcohol, ester, halide, and copolymer resins; polyhexamethylenediamine adipamide resins; (3) protein plastics such as casein, soybean, and coffee-bean; (4) cellulose plastics, regenerated cellulose sheets, and vulcanized fiber; (5) carbohydrate plastics; and (6) synthetic elastomers and other similar products. Establishments primarily engaged in manufacturing rayon and other synthetic fibers are classified in Industry 2825, synthetic rubber in Industry 2824, artificial leather in Industry 2295, and sensitized photographic film in Industry 3861.	29.3	91	81
2824	Synthetic rubber Establishments primarily engaged in manufacturing synthetic rubber by polymerization or copolymerization. Important products of this industry include GR-S, GR-N, Butyl, Neoprene, Thiokol, and all other vulcanizable elastomers. (An elastomer for the purpose of this classification is a rubber-like material which will stretch 150 percent or more and return with force to approximately its original shape and position). Establishments primarily engaged in manufacturing nonvulcanizable elastomer materials are classified in Industry 2823.	7.7	96	89
2825	Synthetic fibers Establishments primarily engaged in manufacturing rayon, nylon, and other synthetic fibers, except glass, to be used as materials for further manufacturing. Important products of this industry include fibers of cellulose acetate, regenerated cellulose, polyvinyl ester, polyvinylidene chloride, vinyl chloride, polymeric amide, and protein. Textile mills primarily engaged in throwing, spinning, and weaving rayon, nylon, or other synthetic fibers, including glass fibers, are classified in Major Group 22.	71.9	97	97
2826	Explosives Establishments primarily engaged in manufacturing explosives such as sporting powder, blasting powder, high explosives, nitrated carbohydrates, safety fuses, and blasting and detonating caps. Establishments primarily engaged in manufacturing ammunition for small arms are classified in Industry 1961, ammunition except for small arms in Group 192, and fireworks in Industry 3985.	10.4	87	99

See footnotes at end of table.

MAJOR GROUP 28—CHEMICALS AND ALLIED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
282	INDUSTRY INORGANIC CHEMICALS—Continued			
2829	Organic chemicals, n.e.c. (Includes SIC Industry 2822, Intermediates, dyes, color lakes, and toners; and 2829, Industrial inorganic chemicals, not elsewhere classified) ----- Establishments primarily engaged in manufacturing industrial organic chemicals, not elsewhere classified. Important products of this industry include: (1) intermediates; dyes, color lakes, and toners; (2) noncyclic organic chemicals such as acetic, chloroacetic, adipic, formic, oxalic and tartaric acids and their metallic salts; chloral, formaldehyde, and methylamine; (3) solvents such as amyl, butyl, and ethyl alcohols; methanol; ethylene glycol, amyl, butyl, and ethyl acetates; ethyl ether, ethylene glycol ether, and diethylene glycol ether; acetone, carbon disulfide, and carbon tetrachloride; (4) synthetic perfume and flavoring materials such as coumarin, methyl salicylate, saccharin, citral, citronellal, synthetic geraniol, ionone, terpineol, and synthetic vanillin; (5) rubber chemicals such as accelerators and anti-oxidants; (6) plasticizers such as synthetic camphor, phthalates and tricresyl and triphenyl phosphates; (7) synthetic tanning materials; and (8) chemical-warfare gases. Establishments primarily engaged in manufacturing cyclic crudes are classified in Industry 2821, plastics materials and nonvulcanizable elastomers in Industry 2823, synthetic rubber in Industry 2824, organic medicinal chemicals in Group 283, soap and glycerin in Industry 2841, essential oils in Industry 2892, and wood distillation products, naval stores and natural dyeing and tanning materials in Group 286. Distilleries engaged in manufacturing grain alcohol for beverage purposes are classified in Industry 2085.	85.0	81	86
283	DRUGS AND MEDICINES			
2831	Biological products ----- Establishments primarily engaged in the production of viruses, serums, toxins, and analogous products such as allergenic extracts, and normal serums and plasmas for human or veterinary use. Establishments primarily engaged in manufacturing bacteriological media are also included in this industry.	3.2	85	57
2832	Botanical products ----- Establishments primarily engaged in grading, grinding, and milling botanical drugs and herbs. Establishments primarily engaged in manufacturing agar-agar are also included in this industry.	.7	73	96
2833	Medicinal chemicals (Inorganic and organic medicinal chemicals) ----- Establishments primarily engaged in manufacturing bulk organic and inorganic medicinal chemicals and their derivatives. Establishments primarily engaged in manufacturing endocrine products, manufacturing or isolating basic vitamins, and isolating active medicinal principles such as alkaloids from botanical drugs and herbs are also included in this industry.	12.4	73	73
2834	Pharmaceutical preparations ----- Establishments primarily engaged in fabricating drugs and medicines in pharmaceutical preparations such as ampules, tablets, capsules, ointments, solutions, and suspensions, for human and veterinary use, including vitamin preparations and Galenicals such as fluid extracts and tinctures. Products of this industry consist of two important lines: (a) pharmaceutical preparations promoted primarily to the dental, medical, or veterinary professions, and (b) pharmaceutical preparations promoted primarily to the public.	65.6	91	96
284	SOAP AND RELATED PRODUCTS			
2841	Soap and glycerin ----- Establishments primarily engaged in manufacturing soap in any form (including shampoos and shaving creams) and in manufacturing crude and refined glycerin. Establishments primarily engaged in manufacturing washing powders and compounds and not engaged in manufacturing soap (soap converters) are classified in Industry 2842, and shampoos and shaving creams from purchased soap in Industry 2893.	27.7	82	92
2842	Cleaning and polishing preparations ----- Establishments primarily engaged in manufacturing cleansers, washing powders and washing compounds and which are not engaged in manufacturing soap. Establishments primarily engaged in manufacturing cleaning preparations containing soap or other detergents; metal, automobile, stove, shoe and other polishes; paint and varnish removers; waxes, stains, finishes and dressings for fabricated leather and other materials; burnishing inks, and related products are also included in this industry.	15.4	85	62
2843	Sulfonated oils and assistants ----- Establishments primarily engaged in producing sulfonated oils and fats and related products such as soluble oils and greases and other soluble assistants, mordants other than tannic acids, and finishes. Tannic acids and synthetic tanning materials are included in Industry 2829; sodium and potassium bichromate, in Industry 2819; and natural dyeing materials, natural tanning materials and chrome mixtures, in Industry 2865.	2.0	77	76

See footnotes at end of table.

MAJOR GROUP 28—CHEMICALS AND ALLIED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
285	PAINTS AND ALLIED PRODUCTS			
2851	Paints and varnishes (<i>Paints, varnishes, lacquers, japans, and enamels</i>)----- Establishments primarily engaged in manufacturing paints (in paste form or mixed ready to use), varnishes, lacquers, japans, enamels, and shellac. Important products of this industry include water paints and calcimines (dry and paste); paints in paste form (white or red lead in oil, zinc oxide in oil, colors in oil or japans); ready mixed and semipaste paints (paints in oil, undercoatings, primers, wall paints, stains, and bituminous paints); varnishes, and varnish stains; clear and pigmented lacquers; enamels, japans, and shellac. Establishments primarily engaged in manufacturing plastics materials are classified in Industry 2823, and artists' oil and water colors in Industry 3954.	53.4	94	96
2852	Inorganic color pigments ----- Establishments primarily engaged in manufacturing dry colors and inorganic color pigments. Important products of this industry include black pigments such as black iron oxide, white pigments such as white lead and blanc fixé, and titanium pigments such as ultramarine and vermillion; and chrome, iron, and other dry colors. Establishments primarily engaged in manufacturing organic color pigments (toners or full-strength colors, reduced toners, and lakes) are classified in Industry 2829; bone black, carbon black, and lamp black in Industry 2895; and artists' oil and water colors in Industry 3954.	13.1	87	83
2853	Whiting and fillers ----- Establishments primarily engaged in manufacturing whiting from limestone or chalk; whiting ground in oil (putty); and wood fillers and allied paint products.	1.3	81	53
286	GUM AND WOOD CHEMICALS			
2861	Hardwood distillation ----- Establishments primarily engaged in the destructive distillation of hardwood resulting in the production of charcoal and pyroligneous acid or raw liquor. Such establishments may be engaged in further distillation and washing processes resulting in the production of tars, oils, acids, and alcohols, such as hardwood pitch, wood creosote, natural acetic acid, wood oils, calcium acetate, ethyl acetate, methanol, and methyl acetone.	1.9	94	95
2862	Softwood distillation ----- Establishments primarily engaged in softwood distillation, resulting in the production of wood naval stores either by the steam-and-solvent process or by the destructive distillation process. Important products of this industry include wood turpentine, wood rosin, pine oil, pitch, tar, tar oils, charcoal, and wood creosote. This industry also includes establishments primarily engaged in manufacturing charcoal from softwood and sawdust in charcoal kilns, and which do not recover the distillation products. Establishments primarily engaged in manufacturing turpentine and rosin by distillation of pine gum are classified in Industry 2863. Pulp mills producing sulfate wood naval stores (sulfate wood turpentine and tall oil) as by-products of the production of pulp by the sulfate process are classified in Industry 2611.	4.6	83	99
2863	Gum naval stores, steam distilled (<i>Part of SIC Industry 2863, Gum naval stores [excludes fire-distilled gum naval stores]</i>)----- Establishments primarily engaged in manufacturing turpentine and rosin by the steam distillation of pine gum. Establishments primarily engaged in manufacturing turpentine and rosin by wood distillation are classified in Industry 2862, and the gathering of pine gum in the forestry industries. Establishments primarily engaged in manufacturing gum naval stores by fire distillation are excluded from the scope of this census.	.6	98	99
2865	Natural tanning and dyeing materials (<i>Includes SIC Industry 2864, Natural dyeing materials; and 2865, Natural tanning materials</i>)----- Establishments primarily engaged in manufacturing solid and liquid tanning extracts from wood, bark, and other vegetable materials, as well as establishments primarily engaged in manufacturing natural dyeing materials from wood, bark, and other vegetable and animal materials. Establishments primarily engaged in manufacturing synthetic dyeing materials or synthetic tanning materials are classified in Industry 2829, chromium compounds in Industry 2819, and leather assistants and finishes in Industry 2843.	1.4	86	78
287	FERTILIZERS			
2871	Fertilizers (<i>Fertilizers, manufacturing and mixing</i>)----- Establishments primarily engaged in manufacturing mixed fertilizers (mixtures containing nitrogen, phosphoric acid [P ₂ O ₅] or potash), from one or more fertilizer materials produced in the same establishment. Sulfuric acid plants operated in conjunction with fertilizer plants and separately reported are classified in Industry 2819. Where separate reports are not available, the sulfuric acid plants are classified in this industry. Establishments primarily engaged in manufacturing fertilizer materials such as muriate and sulfate of potash, but which are not engaged in manufacturing mixed fertilizers are classified in Industry 2819.	20.4	92	60

See footnotes at end of table.

MAJOR GROUP 28—CHEMICALS AND ALLIED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
287	FERTILIZERS—Continued			
2872	Fertilizers, mixing only Establishments primarily engaged in mixing fertilizers from purchased fertilizer materials.	11.6	91	47
288	VEGETABLE AND ANIMAL OILS			
2881	Cottonseed oil mills Establishments primarily engaged in manufacturing cottonseed oil, and byproduct cake, meal, and linters. Establishments primarily engaged in refining cottonseed oil into edible cooking oils are classified in Industry 2092.	14.4	90	90
2882	Linseed oil mills Establishments primarily engaged in manufacturing linseed oil and byproduct cake and meal. Establishments primarily engaged in refining linseed oil into edible cooking oils are classified in Industry 2092.	1.6	77	87
2883	Soybean oil mills Establishments primarily engaged in manufacturing soybean oil, and byproduct cake and meal. Establishments primarily engaged in refining soybean oil into edible cooking oils are classified in Industry 2092.	6.5	96	80
2884	Vegetable oil mills, n.e.c. Establishments primarily engaged in manufacturing vegetable oils such as tung oil, castor oil, palm kernel oil, peanut oil, coconut oil and other vegetable oils, not elsewhere classified, and byproduct cake and meal. Establishments primarily engaged in refining vegetable oils into edible cooking oils are classified in Industry 2092, and those refining these oils for medicinal purposes in Industry 2833.	5.0	80	63
2885	Marine animal oils Establishments primarily engaged in manufacturing fish oil and other marine animal oils, and byproduct meal. Establishments primarily engaged in refining these oils for medicinal purposes are classified in Industry 2833.	1.9	98	73
2886	Grease and tallow Establishments primarily engaged in rendering inedible grease and tallow from animal fat, bones and meat scraps. Wet or dry rendered tankage, edible tallow, and bone meal are also included in this industry. Establishments primarily engaged in manufacturing lard and other edible animal fats are classified in Major Group 20.	12.5	90	50
2887	Fatty acids Establishments primarily engaged in manufacturing fatty acids such as stearic and oleic acid.	1.3	86	76
2889	Animal oils, n.e.c. Establishments primarily engaged in manufacturing animal oils, not elsewhere classified.	.2	83	16
289	MISCELLANEOUS CHEMICAL PRODUCTS			
2891	Printing ink Establishments primarily engaged in manufacturing printing ink, gold and bronze inks, and lithographic ink. Establishments primarily engaged in manufacturing writing and stamp pad inks are classified in Industry 2899.	6.0	92	98
2892	Essential oils Establishments primarily engaged in distilling, expressing, and refining natural essential oils. Establishments primarily engaged in manufacturing synthetic perfume and flavoring materials are classified in Industry 2829, and in blending and in compounding perfume bases and concretes in Industry 2893.	1.2	71	92
2893	Toilet preparations (Perfumes, cosmetics, and other toilet preparations) Establishments primarily engaged in manufacturing perfumes, cosmetics, and other toilet preparations such as toilet water, face powder, rouge, lipstick, personal deodorants, washes, and lotions; hair dyes, tonics, dressings and shampoos; bath salts, manicure preparations, tooth paste, and tooth powder. This industry also includes establishments primarily engaged in blending and compounding perfume bases. Establishments primarily engaged in manufacturing synthetic perfume and flavoring materials are classified in Industry 2829, and soap, including shaving creams and soaps, in Industry 2841.	26.0	85	74
2894	Glue and gelatin Establishments primarily engaged in manufacturing (1) glue from vegetable or animal materials and (2) edible, technical, photographic, or pharmaceutical gelatins from animal materials. Establishments primarily engaged in manufacturing dessert preparations with gelatin base are classified in Industry 2099, vegetable gelatin or agar-agar in Industry 2832, and household adhesives, cements, and mucilage in Industry 2899.	5.4	79	77

See footnotes at end of table.

MAJOR GROUP 28—CHEMICALS AND ALLIED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
289	MISCELLANEOUS CHEMICAL PRODUCTS—Continued			
2895	Carbon black (<i>Bone black, carbon black, and lamp black</i>)----- Establishments primarily engaged in manufacturing bone black, carbon black (channel and furnace black), and lamp black.	3.2	100	97
2896	Compressed and liquefied gases ----- Establishments primarily engaged in manufacturing gases for sale in compressed, liquid, and solid form, such as acetylene, carbon dioxide (dry ice), helium, nitrous oxide, refrigerant gases (except ammonia), and oxygen. Establishments primarily engaged in manufacturing ammonia, chlorine, and sulfur dioxide are classified in Group 281. Natural gasoline plants engaged in the production of gases in compressed and liquefied form are classified in mining industries, and petroleum refineries in Industry 2911.	9.0	100	84
2897	Insecticides and fungicides ----- Establishments primarily engaged in manufacturing inorganic insecticides of copper sulfate, calcium and lead arsenates, and calcium and sodium arsenite; lime-sulfur, sulfur-dust, Paris green; organic insecticides such as rotenone, pyrethrum, and nicotine-bearing insecticides; and miscellaneous insecticides such as organic thiocyanates, DDT, xanthone, and similar products; and fungicides such as copper, sulfur, and mercury-containing fungicides. Establishments primarily engaged in manufacturing household insecticides are classified in Industry 2899; and inorganic chemicals such as white arsenic, calcium and lead arsenate, or sodium fluoride in Industry 2819.	4.6	80	73
2898	Salt ----- Establishments primarily engaged in manufacturing edible salt from rock salt and from natural or artificial brines. Establishments primarily engaged in salt mining are classified in the mining industries.	4.8	100	98
2899	Chemical products, n.e.c. (<i>Chemicals and chemical products, not elsewhere classified</i>)----- Establishments primarily engaged in manufacturing miscellaneous chemical products, not elsewhere classified, such as bluing, laundry soaps, mucilage, writing and stamp pad inks and dextrine sizes; agricultural, industrial and household disinfectants and deodorants; household insecticides and repellents such as fly sprays, rat, ant, and roach poisons and moth repellents; household adhesives and cements; and industrial compounds, such as boiler and insulating compounds, metal, oil, and water-treating compounds, water-proofing compounds, and chemical supplies for foundries.	22.2	82	69

MAJOR GROUP 29—PETROLEUM AND COAL PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes establishments refining crude petroleum and manufacturing coke and coke-oven products, paving and roofing materials, and other products made from petroleum and coal. Establishments manufacturing gas (except coke-oven gas) and distributing gas to consumers are classified in public utility industries.			
291	PETROLEUM REFINING			
2911	Petroleum refining ----- Establishments primarily engaged in producing gasoline, fuel oils, lubricants, illuminating oils, and other products from crude petroleum and its fractionation products in petroleum refineries. Establishments primarily engaged in re-refining or reclaiming used oils (crankcase drainings) by a distillation process are also included in this industry. Establishments primarily engaged in producing natural gasoline from natural gas are classified in mining industries, and in manufacturing lubricating oils and greases by blending and compounding purchased materials in Industry 2992.	145.8	99	98

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1947

MAJOR GROUP 29—PETROLEUM AND COAL PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
293	COKE AND BYPRODUCTS			
2931	Beehive coke ovens..... Establishments primarily engaged in producing coke in beehive ovens.	3.1	100	9
2932	Byproduct coke ovens..... Establishments primarily engaged in manufacturing coke, coal gas, tar, and other products in "byproduct" coke ovens.	35.8	100	93
295	PAVING AND ROOFING MATERIALS			
2951	Paving mixtures and blocks..... Establishments primarily engaged in manufacturing asphalt and tar paving mixtures and manufacturing paving blocks made of asphalt, creosoted wood, and various compositions of asphalt or tar with other materials. Establishments primarily engaged in manufacturing brick, concrete, granite, and stone paving blocks are classified in Major Group 32.	2.7	99	88
2952	Roofing felts and coatings..... Establishments primarily engaged in manufacturing asphalt and other saturated roofing felts in roll or shingle form, either smooth or faced with grit, and in manufacturing roofing cements and coatings. Establishments primarily engaged in manufacturing paints are classified in Industry 2851.	16.6	95	96
299	MISCELLANEOUS PETROLEUM AND COAL PRODUCTS			
2991	Fuel briquets and packaged fuel..... Establishments primarily engaged in manufacturing fuel briquets, boulets, and packaged fuel from anthracite culm, bituminous slack, charcoal, coke screenings, sawdust or other materials, usually mixed with tar or other binders; and in manufacturing powdered fuel.	1.2	100	100
2992	Lubricants, n.e.c. (<i>Lubricating oils and greases not made in petroleum refineries</i>)..... Establishments primarily engaged in blending and compounding lubricating oils and greases from purchased materials. Petroleum refineries engaged in the production of lubricating oils and greases are classified in Industry 2911.	6.3	90	18
2999	Petroleum and coal products, n.e.c..... Establishments primarily engaged in producing petroleum and coal products, not elsewhere classified, such as calcined petroleum coke and compounded or blended wax.	.5	99	100

MAJOR GROUP 30—RUBBER PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes establishments manufacturing from natural or synthetic rubber, gutta percha, balata, or gutta siak, all kinds of rubber products such as tires, rubber footwear, mechanical rubber goods, and rubber sundries. This group also includes establishments manufacturing reclaimed rubber or rebuilt and retreaded rubber tires. Automobile tire repair shops engaged in the recapping and the retreading of automobile tires are classified in service industries. The manufacture of elastic webbing is classified in Major Group 22, products made of elastic webbing and garments made from rubberized fabrics in Major Group 23, and synthetic rubber in Industry 2824.			
301	TIRES AND INNER TUBES			
3011	Tires and inner tubes..... Establishments primarily engaged in manufacturing pneumatic casings, inner tubes, and solid and cushion tires for all types of vehicles. Establishments primarily manufacturing solid and cushion tires and tiring of less than 2 inches, including those for lawn mowers, tricycles, baby carriages, wheelchairs, etc., are classified in Industry 3099.	115.7	90	95

See footnotes at end of tables.

MAJOR GROUP 30—RUBBER PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
302	RUBBER FOOTWEAR			
3021	Rubber footwear ----- Establishments primarily engaged in manufacturing all-rubber footwear, waterproof fabric-upper footwear and other fabric-upper footwear having rubber soles. Establishments primarily engaged in manufacturing rubber, composition, and fiber heels, soles and soling strips and related shoemaking and repairing materials are classified in Industry 3099.	28.1	80	99
303	RECLAIMED RUBBER			
3031	Reclaimed rubber ----- Establishments primarily engaged in reclaiming rubber from used tires, scrap, and miscellaneous waste rubber by manufacturing processes which result in a product that is sold for mixing with crude rubber or rubberlike material as an extender. Establishments primarily engaged in the assembly and wholesale sale of scrap rubber, but not engaged in manufacturing reclaimed rubber, are classified in trade industries.	2.1	95	44
309	RUBBER INDUSTRIES, NOT ELSEWHERE CLASSIFIED			
3099	Rubber industries, n.e.c. ----- Establishments primarily engaged in the manufacturing of industrial and mechanical rubber goods, rubberized fabrics, and vulcanized rubber clothing and miscellaneous rubber specialties and sundries. Establishments primarily engaged in rebuilding and retreading tires for the trade or for wholesale sale are included in this industry but the rebuilding or retreading by tire-repair shops is classified in service industries. Establishments primarily manufacturing rubber garments and garments made from rubber sheeting and from rubberized fabrics produced in the same establishments are classified in this industry, whereas those manufacturing such garments from purchased rubber sheeting and rubberized fabrics are classified in Industry 2385. Establishments primarily engaged in making rubber shoe findings (heels, soles, soling slabs, and top lifts) are included in this industry; those primarily making plastic shoe findings, in Industry 3131. Establishments primarily engaged in manufacturing rubber gaskets are classified in Industry 3293, and rubber girdles in Industry 2342.	113.2	85	81

MAJOR GROUP 31—LEATHER AND LEATHER PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole			
	This major group includes establishments engaged in tanning, currying, and finishing hides and skins, and establishments manufacturing finished leather and artificial leather products and some similar products made of other materials. Jobbers, who do no manufacturing but who assign hides and skins to contractors for tanning and finishing, are included in Industry 3111.			
311	LEATHER TANNING AND FINISHING			
3111	Leather tanning and finishing ----- Establishments primarily engaged in tanning, currying, and finishing sole and belting leathers, upper and lining leathers and miscellaneous specialty leathers, and in embossing, japanning, and currying leather. Two types of establishments operate in this industry; namely, the "regular" tannery which tans, curries, and finishes hides or skins for its own account, and the "contract" factory which tans, curries, and finishes hides or skins owned by others. Jobbers who do no manufacturing but who assign hides and skins to contractors for tanning and finishing are also included in this industry.	53.2	100	100

See footnotes at end of table.

MAJOR GROUP 31—LEATHER AND LEATHER PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
312	INDUSTRIAL LEATHER BELTING			
3121	Industrial leather belting (<i>Industrial leather belting and packing</i>)----- Establishments primarily engaged in manufacturing leather belting used for transmission of power, and leather packing.	5.0	91	98
313	FOOTWEAR CUT STOCK			
3131	Footwear cut stock (<i>Boot and shoe cut stock and findings</i>)----- Establishments primarily engaged in manufacturing leather soles, inner soles, and other shoe cut stock, and leather welting, shanks, heel and toe caps, leather shoe laces, finished wood heels, and other boot and shoe findings. Establishments primarily engaged in manufacturing heels, soling strips and soles made of rubber, composition, and fiber are classified in Industry 3099.	22.1	99	97
314	FOOTWEAR (EXCEPT RUBBER)			
3141	Footwear, except rubber (<i>Footwear, except house slippers and rubber footwear</i>)----- Establishments primarily engaged in manufacturing boots, shoes, sandals, moccasins, and allied footwear, and leggings, overgaiters, etc., made chiefly of leather, but to some extent of canvas and other textiles. Establishments primarily engaged in manufacturing house slippers are classified in Industry 3142, and rubber footwear and rubber-soled canvas footwear in Industry 3021.	229.3	99	100
3142	House slippers ----- Establishments primarily engaged in manufacturing house slippers of leather or other materials.	11.0	94	85
315	LEATHER GLOVES AND MITTENS			
3151	Leather dress gloves (<i>Dress and semidress leather gloves</i>)----- Establishments primarily engaged in manufacturing dress and semidress gloves exclusively of leather. Establishments primarily engaged in manufacturing leather work gloves and mittens are classified in Industry 3152; sporting and athletic gloves in Industry 3949; and dress and semidress gloves and mittens of cloth, or cloth and leather combined in Industry 2381.	9.0	94	95
3152	Leather work gloves (<i>Leather work gloves and mittens</i>)----- Establishments primarily engaged in manufacturing leather work gloves and mittens. Establishments primarily engaged in manufacturing dress and semidress leather gloves are classified in Industry 3151; sporting and athletic leather gloves in Industry 3949; and work gloves and mittens of cloth or cloth and leather combined in Industry 2382.	2.6	82	79
316	LUGGAGE			
3161	Luggage (<i>Suitcases, briefcases, bags, trunks, and other luggage</i>)----- Establishments primarily engaged in manufacturing suitcases, briefcases, bags, trunks, and related luggage of leather or other materials.	16.1	94	97
317	HANDBAGS AND SMALL LEATHER GOODS			
3171	Handbags and purses (<i>Women's handbags and purses</i>)----- Establishments primarily engaged in manufacturing women's handbags and purses of leather or other materials.	20.3	99	97
3172	Small leather goods ----- Establishments primarily engaged in manufacturing small leather articles such as bill-folds; card, cigarette, and key cases; coin purses; and checkbook covers.	5.6	90	90
319	MISCELLANEOUS LEATHER GOODS			
3192	Saddlery, harness, and whips ----- Establishments primarily engaged in manufacturing saddles and parts, harness and parts, halters, horse boots, feed bags, whips and crops, whipstocks, and whip handles. Establishments primarily producing saddlery, harness, etc., to individual order on a custom basis are classified in nonmanufacturing industries.	2.9	86	92
3199	Leather goods, n.e.c. ----- Establishments primarily engaged in manufacturing miscellaneous leather goods, not elsewhere classified, including embossed leather goods, leather desk sets, dog collars and other dog furnishings, leather handles for luggage, novelties, razor strops, and safety belts.	6.2	90	80

See footnotes at end of table.

APPENDIX C

MAJOR GROUP 32—STONE, CLAY, AND GLASS PRODUCTS

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Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes establishments engaged in manufacturing flat glass and other glass products, cement, structural clay products, pottery, concrete and gypsum products, cut-stone products, abrasive and asbestos products, etc., principally from stone, clay, and sand. This major group excludes mines and quarries except common clay pits operated in conjunction with structural-clay products establishments. Also excluded are establishments manufacturing cut-stone products in conjunction with the operation of quarries.			
321	FLAT GLASS			
3211	Flat glass. Establishments primarily engaged in manufacturing flat glass, including plate glass, clear window glass, rolled glass, figured and wire glass, opalescent and obscured glass, spectacle glass, and cathedral and skylight glass. The industry also produces laminated glass, but establishments primarily engaged in manufacturing laminated glass from purchased flat glass are classified in Industry 3231.	27.2	97	81
322	PRESSED AND BLOWN GLASSWARE			
3221	Glass containers. Establishments primarily engaged in manufacturing glass containers for commercial packing and bottling, and for home canning.	47.1	(d)	(d)
3229	Pressed and blown glassware, n.e.c. (Pressed and blown glass and glassware, not elsewhere classified) Establishments primarily engaged in manufacturing pressed and blown glass and glassware, not elsewhere classified. Important products of this industry include machine-made or hand-made glass tableware; glass blanks for electric light bulbs, light shades and reflectors, and other lighting glassware; glass tubing and other technical, scientific, and industrial pressed and blown glassware; glass cooking and oven ware; glass brick; and glass insulators. Establishments primarily engaged in the production of pressed lenses for headlights, beacons, and lanterns are also included in this industry, but establishments primarily engaged in the production [grinding] of optical lenses are classified in Industry 3831. Establishments primarily engaged in manufacturing glass containers are classified in Industry 3221, and complete electric light bulbs in Industry 3651.	42.2	96	90
323	PRODUCTS OF PURCHASED GLASS			
3231	Products of purchased glass (Glass products made of purchased glass) Establishments primarily engaged in manufacturing glass products from purchased glass, including laminated or safety glass, stained, leaded, ornamented, and decorated glass; mirrors; cutware; scientific-apparatus glass; glass novelties; mosaic glass; ground glass; cut, beveled, and etched glass; and glass watch crystals. Establishments primarily engaged in manufacturing optical and ophthalmic lenses are classified in Major Group 38.	22.4	97	78
324	CEMENT, HYDRAULIC			
3241	Cement, hydraulic. Establishments primarily engaged in manufacturing hydraulic cement, including portland, natural, masonry, and puzzolan cements.	35.7	100	100
325	STRUCTURAL CLAY PRODUCTS			
3251	Brick and hollow tile. Establishments primarily engaged in manufacturing clay building brick, vitrified paving brick, and hollow structural tile. Establishments primarily engaged in manufacturing fire brick are classified in Industry 3255, sand-lime brick in Industry 3296, and glass brick in Industry 3229.	29.6	95	97
3253	Floor and wall tile (Floor and wall tile, except quarry tile) Establishments primarily engaged in manufacturing ceramic tile, mosaic tile, glazed and enameled tile including faience and other types of ceramic floor and wall tile (except quarry tile—Industry 3259). Establishments primarily engaged in manufacturing hollow structural tile are classified in Industry 3251, and drain tile in Industry 3259.	6.8	97	95
3254	Sewer pipe. Establishments primarily engaged in manufacturing sewer pipe and kindred products made of clay. Concrete sewer pipe is classified in Industry 3271 and cast-iron sewer pipe in Industry 3321.	9.1	83	92

See footnotes at end of table.

MAJOR GROUP 32—STONE, CLAY, AND GLASS PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
325	STRUCTURAL CLAY PRODUCTS—Continued			
3255	Clay refractories. Establishments primarily engaged in manufacturing fire brick, crucibles, and other heat-resisting clay products such as glass-house tank blocks, stoppers, floaters, and rings. Establishments primarily engaged in manufacturing nonclay refractories are classified in Industry 3297.	18.0	96	94
3259	Structural clay products, n.e.c. Establishments primarily engaged in manufacturing structural clay products, not elsewhere classified, such as architectural terra cotta, roofing tile, stove lining, flue lining, chimney pipes and tops, wall coping, segment blocks, drain tile, and quarry or promenade tile.	5.7	83	70
326	POTTERY AND RELATED PRODUCTS			
3261	Vitreous plumbing fixtures (<i>Vitreous and semivitreous plumbing fixtures</i>) Establishments primarily engaged in manufacturing vitreous and semivitreous pottery plumbing fixtures and accessories. Important products of this industry include bathroom and toilet fixtures, closet bowls, flush tanks, lavatories and stalls, and accessories. Establishments primarily engaged in manufacturing enameled-iron plumbing fixtures are classified in Industry 3431.	7.8	98	99
3262	Vitreous-china food utensils (<i>Vitreous-china table and kitchen articles</i>) Establishments primarily engaged in manufacturing vitreous-china table and kitchen articles for use in households and in hotels, restaurants, and other commercial institutions for preparing, serving, or storing food or drink. Establishments primarily engaged in manufacturing fine (semivitreous) types of earthenware (whiteware) table and kitchen articles are classified in Industry 3263.	11.1	97	97
3263	Earthenware food utensils (<i>Fine earthenware [whiteware] table and kitchen articles</i>) Establishments primarily engaged in manufacturing fine (semivitreous) types of earthenware table and kitchen articles for preparing, serving, or storing food or drink. Establishments primarily engaged in manufacturing vitreous-china table and kitchen articles are classified in Industry 3262.	16.7	92	97
3264	Porcelain electrical supplies. Establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, spark-plug and steatitic porcelain, and other electrical supplies from clay and other ceramic materials.	11.5	89	93
3265	China decorating for the trade. Establishments primarily engaged in firing and decorating white china and earthenware for the trade. Establishments primarily engaged in firing and decorating china to individual order are classified in service industries.	1.0	100	98
3269	Pottery products, n.e.c. Establishments primarily engaged in manufacturing art and decorative pottery, industrial and laboratory ware, and miscellaneous crockery, earthenware, stoneware, and other pottery products, not elsewhere classified. Important products of this industry include china, earthenware, and stoneware figures; vases, lamp bases, and garden pottery; chemical porcelain; industrial or laboratory ware; grinding media; forms for dipped rubber goods; filtering media; earthenware flower pots; and pyrometric cones and tubes. Stoneware table and kitchen articles are also included in this industry.	9.7	95	83
327	CONCRETE AND PLASTER PRODUCTS			
3271	Concrete products. Establishments primarily engaged in manufacturing concrete building blocks and shapes, pipe and conduit, and similar products such as poles, piling, septic tanks, garbage boxes, garden furniture, incinerators, and vaults made from a combination of stone or gravel, sand, and cement. Contractors engaged in concrete construction work are classified in the construction industries, and building-materials dealers engaged in mixing and delivering ready-mixed concrete in the trade industries.	46.8	99	100
3272	Gypsum products. Establishments primarily engaged in manufacturing plaster, plaster board, and other products composed wholly or chiefly of gypsum.	7.5	97	98
3274	Lime. Establishments primarily engaged in manufacturing quicklime, hydrated lime, and dead-burned dolomite from limestone, dolomite, shells, and other substances.	7.0	93	97

See footnotes at end of table.

MAJOR GROUP 32—STONE, CLAY, AND GLASS PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
327	CONCRETE AND PLASTER PRODUCTS—Continued			
3275	Mineral wool. ----- Establishments primarily engaged in manufacturing mineral wool and mineral-wool insulation products made of such materials as rock, slag, and silica. Establishments primarily engaged in producing vermiculite products are classified in Industry 3299.	8.9	(d)	(d)
328	CUT-STONE AND STONE PRODUCTS			
3281	Cut-stone and stone products (<i>Part of SIC Industry 3281, Cut-stone and stone products [from purchased stone only]</i>)----- Establishments primarily engaged in cutting, shaping, and finishing marble, granite, limestone, and other stone for building and miscellaneous uses from purchased stone. Establishments manufacturing cut-stone products in conjunction with the operation of quarries are excluded from this industry. Important products of this industry include monuments and tombstones, dimension stones for buildings, slate blackboards, and stone furniture. Establishments primarily engaged in buying or selling partly finished monuments and tombstones, but performing no work on the stones other than lettering or finishing to custom order, are classified in trade industries. The quarrying of dimension stone and the operation of dimension-stone dressing plants in conjunction with such quarries are classified in the mining industries. Also, the cutting of grindstones, pulpstones, and whetstones at the quarry is classified in mining industries.	9.9	100	98
329	MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS			
3291	Abrasive products. ----- Establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials; abrasive sticks, stones, bricks, paper, and cloth; abrasive grains, natural or manufactured; and buffing and polishing wheels. The cutting of grindstones, pulpstones, and whetstones at the quarry is classified in the mining industries.	20.8	93	86
3292	Asbestos products. ----- Establishments primarily engaged in manufacturing asbestos textiles, asbestos building materials (except asbestos paper—Industry 2613), and other commodities composed wholly or chiefly of asbestos, except steam and other packing, pipe and boiler covering, and gaskets (Industry 3293).	21.5	87	91
3293	Gaskets and asbestos insulations (<i>Steam and other packing, and pipe and boiler covering</i>)----- Establishments primarily engaged in manufacturing packing for steam, water, and other pipe joints, and for engines, air compressors, etc.; asbestos insulating materials for covering boilers and pipes; and gaskets. This industry includes gaskets made of all materials, but excludes rubber, leather, and metal packings.	13.0	83	78
3294	Graphite: ground or blended (<i>Natural graphite: ground, refined, or blended</i>)----- Establishments primarily engaged in grinding, refining, or blending natural graphite (plumbago).	.9	73	93
3295	Minerals: ground or treated (<i>Minerals and earths: ground or otherwise treated</i>)----- Establishments primarily engaged in grinding, pulverizing, or otherwise treating certain earths, rocks, or minerals, such as barytes, borax, chalk, clays, Cornwall stone, feldspar, kaolin, mica, pumice, quartz, silica, and talc. Establishments primarily engaged in crushing or grinding purchased slag are also included in this industry.	8.0	96	91
3296	Sand-lime products (<i>Sand-lime brick, block, and tile</i>)----- Establishments primarily engaged in manufacturing sand-lime brick, block, and tile.	.3	94	71
3297	Nonclay refractories. ----- Establishments primarily engaged in manufacturing refractories and crucibles made of materials other than clay. Establishments primarily engaged in manufacturing clay refractories and crucibles are classified in Industry 3255.	10.3	94	91
3298	Statuary and art goods (<i>Statuary and art goods—factory production</i>)----- Establishments primarily engaged in the factory production of statuary and art goods made of plaster of paris and papier-maché. Important products of this industry include such articles as statuary, small images, and architectural sculptures; ornamental plaster work such as mantels, columns, panels, moldings, brackets, vases, urns, and pedestals; and scagliola and papier-maché articles.	2.0	91	97
3299	Nonmetallic mineral products, n.e.c. (<i>New industry classification, not provided for in the Standard Industrial Classification</i>)----- Establishments primarily engaged in manufacturing nonmetallic mineral products, not elsewhere classified. Principal products of the industry are sheet mica products, except radio parts; exfoliated vermiculite; stucco; and magnesite floor composition.	3.6	90	85

MAJOR GROUP 33—PRIMARY METAL INDUSTRIES

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipment of these products by all industries
	The Major Group as a Whole This major group includes establishments engaged in the smelting and refining of ferrous and nonferrous metals from ore, pig, or scrap; in the rolling, drawing, and alloying of ferrous and nonferrous metals; and in the manufacture of castings, forgings, and other basic products of ferrous and nonferrous metals.			
331	BLAST FURNACES AND STEEL MILLS			
3311	Blast furnaces Establishments primarily engaged in manufacturing pig iron and blast furnace ferro-alloys from iron ore and scrap. Establishments primarily engaged in manufacturing ferro and nonferrous additive alloys by electrometallurgical processes are classified in Industry 3313.	36.9	100	100
3312	Steel works and rolling mills Establishments primarily engaged in converting pig iron, scrap iron, and scrap steel into steel, and in hot-rolling iron and steel into basic shapes such as plates, sheets, strips, rods, bars, and tubing. In many such establishments, the manufacturing processes are carried beyond the hot-rolling stage.	500.8	(²)	(²)
3313	Electrometallurgical products Establishments primarily engaged in manufacturing ferro and nonferrous additive alloys by electrometallurgical processes, including high-percentage ferro-alloys such as ferromanganese, ferrochromium, ferrovanadium, and ferrotitanium, and high-percentage nonferrous additive alloys. Establishments primarily engaged in manufacturing blast-furnace ferro-alloys are classified in Industry 3311.	9.6	188	95
332	IRON AND STEEL FOUNDRIES			
3321	Gray-iron foundries Establishments primarily engaged in manufacturing gray-iron castings, including cast gray-iron pipe and fittings.	173.8	92	87
3322	Malleable-iron foundries Establishments primarily engaged in manufacturing malleable-iron castings.	29.9	88	91
3323	Steel foundries Establishments primarily engaged in manufacturing steel castings. Establishments which produce heat and corrosion resistant castings as well as those making carbon and low alloy steel castings are included in this industry.	63.7	88	83
333	PRIMARY NONFERROUS METALS			
3331	Primary copper (<i>Primary smelting and refining of copper</i>) Establishments primarily engaged in smelting copper from the ore, and in refining copper by electrolytic or other processes. Important products of this industry include copper blocks, slabs, pigs, ingots, or refinery bars. Establishments primarily engaged in rolling and drawing copper are classified in Industry 3351.	14.6	(²)	(²)
3332	Primary lead (<i>Primary smelting and refining of lead</i>) Establishments primarily engaged in smelting lead from ore, and in refining lead by any process. Important products of this industry include lead blocks, slabs, pigs, or ingots. Establishments primarily engaged in rolling and drawing lead are classified in Industry 3359.	4.7	(²)	(²)
3333	Primary zinc (<i>Primary smelting and refining of zinc</i>) Establishments primarily engaged in smelting zinc from the ore, and in refining zinc by any process. Important products of this industry include zinc blocks, slabs, spelter, pigs, or ingots. Establishments primarily engaged in rolling and drawing zinc are classified in Industry 3359.	12.4	689	6100
3334	Primary aluminum (<i>Primary refining of aluminum</i>) Establishments primarily engaged in producing aluminum from the ore or from alumina, and in refining aluminum by any process. Important products of this industry include aluminum blocks, slabs, pigs, or ingots. Establishments primarily engaged in rolling and drawing aluminum are classified in Industry 3352.	8.9	172	100
3339	Primary nonferrous metals, n.e.c. (<i>Includes SIC Industry 3335, Primary refining of magnesium; and 3339, Primary smelting and refining of nonferrous metals, not elsewhere classified</i>) Establishments primarily engaged in smelting and refining nonferrous metals, not elsewhere classified, including magnesium, gold, silver, platinum, iridium, cobalt, nickel, tin, and antimony. Establishments primarily engaged in rolling and drawing these nonferrous primary metals are classified in Industry 3359, and the production of bullion at the site of the mine is classified in the mining industries.	2.2	96	16

See footnotes at end of table.

MAJOR GROUP 33—PRIMARY METAL INDUSTRIES—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
334	SECONDARY NONFERROUS METALS			
3341	Secondary nonferrous metals (Includes SIC Industry 3341, Secondary smelting and refining of nonferrous metals and alloys; and establishments engaged in alloying primary nonferrous metals from SIC Industry Group 335)----- Establishments primarily engaged in recovering nonferrous metals and alloys from new and used scrap and dross, but which are not engaged in further fabrication. This industry includes establishments engaged in the alloying of nonferrous primary metals. Plants engaged in the recovery of tin through secondary smelting and refining are classified in this industry, but those primarily engaged in detinning cans by chemical processes without the production of tin are classified in Industry 2819. Establishments primarily engaged in assembling, sorting, and breaking up scrap metal, without smelting and refining are classified in trade industries.	18.4	98	90
335	NONFERROUS METAL ROLLING AND DRAWING			
3351	Copper rolling and drawing (Part of SIC Industry 3351, Rolling, drawing, and alloying of copper [excludes establishments primarily engaged in alloying primary copper])----- Establishments primarily engaged in rolling, drawing, and extruding copper, brass, bronze, and other copper-base alloy basic shapes such as plates, sheets, strips, rods, and tubing. Establishments primarily engaged in drawing wire from purchased copper and copper-base alloy rods are classified in Industry 3392, and in manufacturing insulated wire from purchased copper wire in Industry 3631.	53.9	95	92
3352	Aluminum rolling and drawing (Part of SIC Industry 3352, Rolling, drawing, and alloying of aluminum [excludes establishments primarily engaged in alloying primary aluminum])----- Establishments primarily engaged in rolling, drawing, and extruding aluminum and aluminum-base alloy basic shapes such as plates, sheets, rods, wire, and tubing. Establishments primarily engaged in drawing wire from purchased aluminum and aluminum-base alloy rods are classified in Industry 3392.	27.4	(d)	96
3359	Nonferrous metal rolling, n.e.c. (Part of SIC Industry 3359, Rolling, drawing, and alloying of nonferrous metals, not elsewhere classified [excludes establishments primarily engaged in alloying primary nonferrous metals, except copper and aluminum])----- Establishments primarily engaged in rolling and drawing nonferrous metals other than copper (Industry 3351) and aluminum (Industry 3352). The products of this industry are produced in the form of basic shapes such as sheets, strips, bars, rods, wire, and tubing. Establishments primarily engaged in manufacturing gold, silver, tin and other foils in Industry 3497, and in drawing wire from purchased nonferrous rods in Industry 3392.	7.6	80	94
336	NONFERROUS FOUNDRIES			
3361	Nonferrous foundries ----- Establishments primarily engaged in manufacturing castings and die castings of aluminum, brass, bronze, and other nonferrous metals and alloys.	65.3	94	91
339	MISCELLANEOUS PRIMARY METAL INDUSTRIES			
3391	Iron and steel forgings ----- Establishments primarily engaged in manufacturing light and heavy-board drop, steam hammer, upset and press forgings with or without the use of dies. Rolling mills engaged in the production of iron and steel forgings are classified in Industry 3312.	36.7	95	77
3392	Wire drawing ----- Establishments primarily engaged in drawing wire from purchased iron, steel, or nonferrous metal rods or bars, and which may be engaged in the further manufacture of products made from wire. Rolling mills engaged in the production of ferrous wire are classified in Industry 3312, and establishments primarily engaged in rolling and drawing nonferrous metals in Group 335. Establishments primarily engaged in manufacturing insulated wire and cable from purchased wire are classified in Industry 3631, and other wire products from purchased wire in Group 348.	55.1	96	37
3393	Welded and heavy-riveted pipe ----- Establishments primarily engaged in manufacturing welded pipe and tubes, and lock-joint and heavy-riveted pipe from purchased skelp. Rolling mills engaged in manufacturing welded and heavy-riveted pipe are classified in Industry 3312.	13.1	95	25
3399	Primary metal industries, n.e.c. ----- Establishments primarily engaged in manufacturing flat, bright, cold-rolled strip (including razor-blade strip), cold-rolled sheets, cold-finished steel bars, nonferrous forgings, ferrous and nonferrous flakes and powders, and other primary metal products, not elsewhere classified. Establishments primarily engaged in annealing and heat-treating steel for the trade are also included in this industry.	22.1	94	26

See footnotes at end of table.

MAJOR GROUP 34—FABRICATED METAL PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	<p align="center">The Major Group as a Whole</p> <p>This major group includes establishments engaged in fabricating ferrous and non-ferrous metal products such as tin cans and other tinware, hand tools, cutlery, general hardware, nonelectric heating apparatus, fabricated structural metal products, metal stampings, lighting fixtures, fabricated wire products, and a variety of metal products, not elsewhere classified. Establishments primarily engaged in manufacturing small machine parts by powder metallurgy (Standard Industrial Classification Industry 3464) are classified according to principal products made rather than by process of manufacture. Certain important segments of the metal fabricating industries are classified in other major groups such as machinery in Major Groups 35 and 36, transportation equipment in Major Group 37, professional, scientific, and controlling instruments, watches and clocks in Major Group 38, and jewelry and silverware in Major Group 39. The production of ferrous and nonferrous metals and their alloys, and basic products made of metal, are classified in Major Group 33. Heating, plumbing, air-conditioning, refrigeration, and roofing contractors incidentally manufacturing boiler shop or sheet metal products are classified in nonmanufacturing industries.</p>			
341	TIN CANS AND OTHER TINWARE			
3411	<p>Tin cans and other tinware-----</p> <p>Establishments primarily engaged in manufacturing packers' cans, beer cans, general-line cans, oil containers, milk and ice-cream cans, and other tinware (except household and hospital utensils—Industry 3463) from purchased tinplate, terneplate, blackplate, or enameled sheet metal.</p>	46.9	96	99
342	CUTLERY, HAND TOOLS, AND HARDWARE			
3421	<p>Cutlery (<i>Part of SIC Industry 3421. Cutlery [excludes hair clippers and electric shavers]</i>)-----</p> <p>Establishments primarily engaged in manufacturing cutlery, such as table cutlery (except sterling-silver and silver-plated cutlery—Industry 3914); scissors, razors, safety-razor blades, manicure implements, pocket knives, butcher knives, and cleavers. This industry also includes hedge and other trimmers, and tinners and other snips. Establishments primarily engaged in manufacturing animal hair clippers are classified in Industry 3522, other hair clippers in Industry 3991, and electric dry shavers in Industry 3621.</p>	20.2	93	94
3422	<p>Edge tools-----</p> <p>Establishments primarily engaged in manufacturing all kinds of edge tools, such as scythes, axes, planes, chisels, drawknives; and cutting dies for use in cutting cloth, paper, and leather. Establishments primarily engaged in manufacturing metal-cutting dies are classified in Industry 3543.</p>	8.8	80	77
3423	<p>Hand tools, n.e.c. (<i>Hand tools, except edge tools, machine tools, files, and saws</i>)-----</p> <p>Establishments primarily engaged in manufacturing hand tools, such as hammers, wrenches, pliers, screw drivers, shovels, rakes, and a variety of special tools used by repairmen, jewelers, stone-cutters, and ironworkers. Establishments primarily engaged in manufacturing edge tools are classified in Industry 3422, files in Industry 3424, saws in Industry 3425, and power-driven hand tools in Major Group 35.</p>	35.7	81	85
3424	<p>Files-----</p> <p>Establishments primarily engaged in manufacturing and recutting files and rasps.</p>	4.4	94	93
3425	<p>Hand saws and saw blades-----</p> <p>Establishments primarily engaged in manufacturing hand saws and saw blades for hand and power-driven saws. Establishments primarily engaged in manufacturing power-driven sawing machines are classified in Major Group 35.</p>	8.4	78	87
3429	<p>Hardware, n.e.c.-----</p> <p>Establishments primarily engaged in manufacturing miscellaneous metal products usually termed "hardware" and not elsewhere classified. Important products of this industry include door locks, lock sets, and other builders' hardware; motor-vehicle and other transportation equipment hardware; hardware for caskets, furniture, cabinets, saddlery, harness, trunks, and suitcases; locks and padlocks; vacuum bottles and jugs. Establishments primarily engaged in manufacturing bolts and nuts are classified in Industry 3494, nails and spikes in Industry 3481, cutlery in Industry 3421, and hand tools in Industry 3423.</p>	76.5	90	91
343	HEATING AND PLUMBING EQUIPMENT			
3431	<p>Metal plumbing fixtures and fittings (<i>Enameled-iron and metal sanitary and other plumbers' supplies</i>)-----</p> <p>Establishments primarily engaged in manufacturing enameled-iron, cast-iron, or pressed-metal sanitary ware such as bathtubs, sinks, lavatories, and laundry tubs; and plumbers' brass goods and fittings such as faucets, spigots, and steam and water traps. These establishments may also manufacture small plumbers' valves, stopcocks, and nozzles, but establishments specializing in the manufacture of steam or waterline valves are classified in Industry 3591. Establishments primarily engaged in manufacturing vitreous and semivitreous-pottery sanitary ware are classified in Industry 3261, and vitreous-enameled kitchen, household, and hospital ware in Industry 3461.</p>	34.1	87	89

See footnotes at end of table.

MAJOR GROUP 34—FABRICATED METAL PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
343	HEATING AND PLUMBING EQUIPMENT—Continued			
3432	Oil burners (<i>Oil burners, domestic and industrial</i>)----- Establishments primarily engaged in manufacturing distillate or fuel oil burners used for installation in heating and cooking equipment, for industrial-process equipment, and for generating steam for power. Establishments primarily engaged in manufacturing complete boiler-burner units and furnace-burner units are classified in Industry 3439.	6.3	80	64
3439	Heating and cooking apparatus, n.e.c. (<i>Heating and cooking apparatus, except electric, not elsewhere classified</i>)----- Establishments primarily engaged in manufacturing heating and cooking equipment, not elsewhere classified. Important products of this industry include stoves, ranges, water heaters, warm-air furnaces, domestic steam and hot-water heating apparatus, cast-iron and nonferrous radiators, complete gas and oil boiler-burner units, furnace-burner units, boiler-stoker units, incinerators, unit heaters, gas burners, portable ovens, steam tables, and cafeteria food warming equipment. Establishments primarily engaged in manufacturing electric stoves and ranges are classified in Industry 3621, incubators and brooders in Industry 3522, and industrial furnaces and ovens in Industry 3567. Boiler shops primarily engaged in the production of industrial, power, and marine boilers, smoke stacks, heavy tanks, and other plate work are classified in Industry 3443.	110.5	84	87
344	STRUCTURAL METAL PRODUCTS			
3441	Structural and ornamental products (<i>Fabricated structural steel and ornamental metal work</i>)----- Establishments primarily engaged in manufacturing fabricated iron and steel or other metal for structural purposes, and architectural ornamental work of ferrous and nonferrous metals. Important products of this industry include structural steel shapes, stairs and staircases, fire escapes, grilles, railings, fences and posts, and portable metal buildings. Establishments primarily engaged in manufacturing metal doors, sash, frames, moldings, and trim are classified in Industry 3442, and fabrication work done by construction contractors at the site of construction is classified in construction industries.	79.7	86	88
3442	Metal doors, sash, and trim (<i>Metal doors, sash, frames, molding, and trim</i>)----- Establishments primarily engaged in manufacturing ferrous and nonferrous and metal-covered doors and sash, window and door frames, store fronts, molding, and trim.	21.1	83	86
3443	Boiler shop products ----- Establishments primarily engaged in manufacturing industrial, power, and marine boilers, smoke stacks, heavy tanks, and other boiler shop products; and fabricated plate work, which involves the cutting, punching, bending, and shaping of steel plates for other industries, or for assembly on the job. Establishments primarily engaged in manufacturing domestic heating and cooking apparatus are classified in Industry 3439, and light tanks from sheet metal in Industry 3444.	69.0	81	81
3444	Sheet-metal work ----- Establishments primarily engaged in manufacturing cornices, ventilators, skylights, gutters, and other types of sheet-metal work for buildings (not including fabrication work done by construction contractors at the place of construction), and manufacturing sheet-metal stovepipes, light tanks, bins, furnace casings, etc. Establishments primarily engaged in manufacturing heavy tanks from plate are classified in Industry 3443; domestic heating apparatus such as expansion tanks, range boilers, hot-water storage tanks, and tanks for water heaters in Industry 3439. Heating, refrigeration, air-conditioning and roofing contractors incidentally producing sheet-metal products are classified in non-manufacturing industries.	42.6	86	52
346	METAL STAMPING AND COATING			
3461	Vitreous-enameled products ----- Establishments primarily engaged in manufacturing vitreous-enameled kitchen, household, and hospital utensils; table tops; refrigerator, stove and washing-machine parts, etc. Establishments primarily engaged in manufacturing enameled-iron plumbing fixtures are classified in Industry 3431.	12.2	82	71
3463	Metal stampings (<i>Includes SIC Industry 3462, Automobile stampings; and 3463, stamped and pressed metal products, except automobile stampings</i>)----- Establishments primarily engaged in manufacturing metal stampings of ferrous or nonferrous metal such as bottle caps and tops; stamped kitchen, household, and hospital utensils; perforated metal; stamped and pressed machine parts; and automobile stampings such as fenders, tops, hub caps, body parts, and trim. Establishments primarily engaged in stamping and spinning metal for the trade are also included in this industry; but establishments primarily engaged in manufacturing stamped vitreous-enameled products are classified in Industry 3461, and establishments primarily engaged in assembling complete automobile bodies are classified in Group 371.	132.0	86	82

See footnotes at end of table.

MAJOR GROUP 34—FABRICATED METAL PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
346	METAL STAMPING AND COATING—Continued			
3465	Enameling and lacquering (<i>Enameling, japanning, and lacquering</i>) ----- Establishments primarily engaged in enameling, japanning, and lacquering metal products for the trade.	4.0	(³)	(³)
3466	Galvanizing (<i>Galvanizing and other hot-dip coating</i>) ----- Establishments primarily engaged in galvanizing iron and steel sheets or formed products; in coating iron sheets or formed products with aluminum, lead, or zinc; and in retinning cans and utensils. Most of the work done in this industry is done on materials owned by others. Rolling mills engaged in galvanizing, tinning, and other coating are classified in Industry 3312.	3.1	(³)	(³)
3467	Engraving on metal ----- Establishments primarily engaged in engraving, chasing, and etching jewelry, silverware, notarial seals, and other metal products for the trade, for purposes other than printing. Establishments primarily engaged in preparing metal lithographic plates are classified in Industry 2761; engraving and etching steel and copper plates for use in printing in Industry 2792; and preparing photoengraved plates (halftones and linecuts) in Industry 2793.	3.4	(³)	(³)
3468	Plating and polishing (<i>Electroplating, plating, and polishing</i>) ----- Establishments primarily engaged in all types of electroplating, plating, and metal-polishing work. Most of the work done in this industry is done on materials owned by others.	28.2	(³)	(³)
347	LIGHTING FIXTURES			
3471	Lighting fixtures ----- Establishments primarily engaged in manufacturing lighting fixtures and equipment of any type, including electric and gas lighting fixtures, carbide, kerosene, and gasoline lamps, and metal reflectors and fittings. Establishments primarily engaged in producing glassware for lighting fixtures are classified in Major Group 32, and electric light bulbs, tubes, and related light sources in Industry 3651.	47.6	90	90
348	FABRICATED WIRE PRODUCTS			
3481	Nails and spikes ----- Establishments primarily engaged in manufacturing wire and cut nails, brads, spikes, staples, and tacks from purchased rods, wire, and plate. Establishments primarily engaged in drawing wire from purchased rods and in manufacturing nails, brads, spikes, and staples are classified in Industry 3392, and rolling mills manufacturing similar products in Industry 3312.	3.8	79	19
3489	Wirework, n.e.c. ----- Establishments primarily engaged in manufacturing from purchased wire, ferrous and nonferrous wire products, not elsewhere classified. Important products of this industry include fencing, fly screening, cloth and netting, bare wire rope and cable, barbed wire, tire chains, bale ties, concrete reinforcing wire and mesh, springs, coated welding wire, wire guards and partitions, wire grilles, trays and baskets and kitchen wire goods. Establishments primarily engaged in manufacturing insulated wire from purchased wire are classified in Industry 3631, and establishments engaged in drawing wire from purchased rods and in manufacturing wire products are classified in Industry 3392.	56.8	91	60
349	MISCELLANEOUS FABRICATED METAL PRODUCTS			
3491	Metal barrels, drums, and pails (<i>Metal shipping barrels, drums, kegs, and pails</i>) ----- Establishments primarily engaged in manufacturing ferrous and nonferrous shipping barrels, drums, kegs, and pails.	10.9	83	83
3492	Safes and vaults ----- Establishments primarily engaged in manufacturing safes and vaults (except concrete grave vaults—Industry 3271), vault doors and linings, safe-deposit boxes and chests and safe locks.	3.8	98	98
3493	Steel springs ----- Establishments primarily engaged in manufacturing leaf springs, hot-wound springs, and coiled flat springs. Establishments primarily engaged in manufacturing wire springs classified in Industry 3489, and rolling mills manufacturing steel springs in Industry 3312.	7.8	90	69
3494	Bolts, nuts, washers, and rivets ----- Establishments primarily engaged in manufacturing bolts, nuts, washers, rivets, turn-buckles, screws, and toggle bolts. Rolling mills engaged in manufacturing similar products are classified in Industry 3312. Establishments primarily engaged in manufacturing screw-machine products are classified in Industry 3495.	49.2	92	86

See footnotes at end of table.

MAJOR GROUP 34—FABRICATED METAL PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
349	MISCELLANEOUS FABRICATED METAL PRODUCTS—Continued			
3495	Screw-machine products Establishments primarily engaged in manufacturing automatic or hand screw-machine products from rod, bar, or tube stock of metal, fiber, plastic, or other material. The products of this industry consist of a wide variety of unassembled parts and are usually manufactured on a job or order basis. This industry does not include establishments primarily engaged in making standard size and type nuts, bolts, rivets, and screws, on screw-machines; these establishments, together with those making nuts, bolts, etc., on headers, threaders, and nut-forming machines, are included in Industry 3494.	28.5	93	86
3496	Collapsible tubes Establishments primarily engaged in manufacturing collapsible tubes, made of aluminum, tin, plastic, and other materials, for use as containers for toilet preparations, adhesives, etc.	3.9	91	100
3497	Metal foil (Gold, silver, tin, aluminum, and other foil) Establishments primarily engaged in manufacturing gold, silver, tin, aluminum, and other foil and leaf.	4.3	97	88
3499	Fabricated metal products, n.e.c. Establishments primarily engaged in manufacturing metal products, not elsewhere classified, including metal novelties and specialties. Other products included in the industry are frogs, switches, crossings, and similar railway track accessories; aluminum giftware; metal bookends; and aluminum ladders.	7.6	90	59

MAJOR GROUP 35—MACHINERY (EXCEPT ELECTRICAL)

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes establishments engaged in manufacturing machinery and prime movers other than electrical equipment (Major Group 36). Machines powered by built-in or detachable electric motors ordinarily are included in this major group with the exception of certain types of small electrical household appliances (Major Group 36). Portable tools, both electric and pneumatic powered, are included in this major group, but hand tools are classified in Major Group 34.			
351	ENGINES AND TURBINES			
3511	Steam engines and turbines (Includes SIC Industry 3511, Steam engines, turbines and water wheels; and turbo-generators powered by steam and water power from 3514, Motors, generators, and motor-generator sets) Establishments primarily engaged in manufacturing steam engines, steam turbines, water wheels, and water turbines, turbo-generators and water-wheel generator sets. Establishments primarily engaged in building or rebuilding locomotives are classified in Industry 3741.	21.6	82	77
3519	Internal-combustion engines (Diesel and semi-Diesel engines; and other internal-combustion engines, not elsewhere classified) Establishments primarily engaged in manufacturing Diesel or semi-Diesel engines, and other internal-combustion engines, not elsewhere classified, for stationary, marine, traction, or other uses. Establishments primarily engaged in manufacturing aircraft engines are classified in Industry 3722, and automobile engines in Industry 3717.	71.4	74	79
352	TRACTORS AND FARM MACHINERY			
3521	Tractors Establishments primarily engaged in manufacturing wheel-type and track-laying tractors, and garden tractors. Establishments primarily engaged in manufacturing industrial trucks, tractors, and trailers used for handling materials in industrial plants, depots, and docks are classified in Industry 3565.	77.3	83	94

MAJOR GROUP 35—MACHINERY (EXCEPT ELECTRICAL)—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
352	TRACTORS AND FARM MACHINERY—Continued			
3522	Farm machinery, except tractors (<i>Agricultural machinery, except tractors</i>)----- Establishments primarily engaged in manufacturing agricultural machinery and equipment (except tractors, Industry 3521) for use in the preparation or maintenance of the soil, planting and harvesting of the crop, preparing crops for market, or for use in performing other agricultural operations and processes. Establishments primarily engaged in manufacturing agricultural hand tools are classified in Group 342.	94.1	89	92
353	CONSTRUCTION AND MINING MACHINERY			
3531	Construction and mining machinery (<i>Construction, mining, and similar machinery, except oil-field machinery and tools</i>)----- Establishments primarily engaged in manufacturing heavy machinery and equipment used by the construction and mining industries for portable or fixed-plant operation, in dredging, excavating, road and airport construction, ore and rock crushing, screening or washing, ore dressing or concentration. Establishments primarily engaged in manufacturing well-drilling machinery are classified in Industry 3532, and coal and ore conveyors in Industry 3563.	84.7	85	82
3532	Oil-field machinery and tools ----- Establishments primarily engaged in manufacturing machinery and tools for use in oil and gas fields, or for drilling water wells.	29.2	88	91
354	METALWORKING MACHINERY			
3541	Machine tools ----- Establishments primarily engaged in manufacturing power-driven machine tools that shape metal by grinding or progressively cutting away chips. Important products of this industry include boring, broaching, drilling, gear-cutting and finishing, grinding, milling, and planing machines; lathes, shapers, and slotters; honing and lapping, polishing and buffing, sawing and cutting-off, contour-sawing and filing, tapping, threading, and rifling machines, and replacement and repair parts for machine tools. The rebuilding of machine tools is included in this industry. Establishments primarily engaged in manufacturing machinery for the shaping, pressing, or forging of metal, where the shaping action of such machines is not dependent upon a cutting tool are classified in Industry 3542, and machine-tool accessories, dies, and machinists' precision tools in Industry 3543.	70.7	77	87
3542	Metalworking machinery, n.e.c. (<i>Includes SIC Industry 3542, Metalworking machinery, except machine tools; and portable electric woodworking tools from 3553, Woodworking machinery</i>)----- Establishments primarily engaged in manufacturing machinery for shaping, pressing, forging, or bending metal, where the shaping action of such machines is not dependent upon a cutting tool. Important products of this industry include bending machines; can forming and soldering, and other sheet-metalworking machinery; die-casting machines; forging machines, such as drop hammers (impression die), forging hammers (flat die), forging presses, bulldozers, and upsetters; portable power-driven metalworking and woodworking tools, and flexible-shaft machines; presses (forming, stamping, and punch); riveting machines (not portable); rod and wire-forming and fabricating machines; rolling-mill machinery and equipment; shears; spring-winding and forming machines; acetylene welding and cutting apparatus; wire-drawing machines; and replacement and repair parts. Establishments primarily engaged in manufacturing electric welding apparatus are classified in Industry 3617.	55.0	87	87
3543	Cutting tools, jigs, fixtures, etc. (<i>Machine-tool accessories, other metalworking-machinery accessories, and machinists' precision tools</i>)----- Establishments primarily engaged in manufacturing attachments and accessories for machine tools and other metalworking machinery; small power-driven cutting and shaping tools and tool holders; and precision measuring tools. Important products of this industry include: (1) attachments for lathes, boring, drilling, and milling machines and other machine tools; balancing machines; die-casting dies; jigs, fixtures, drop-forging dies, forming and stamping dies and punches, and subpresses; tools for screw and automatic machines; and semifinished products such as die sets, leather pins, dowel pins, and die springs; (2) arbors and collars; broaches; collets or sockets; countersinks; countersink-drill combinations; drills; cutters; reamers; threading tools (taps, dies, and pipe-threading tools) and other cutting tools and tool holders; and (3) precision measuring tools (micrometers and verniers); gauges (plug, ring, snap, and thread); and other measuring tools. Establishments primarily engaged in manufacturing hand tools (except power-driven) are classified in Group 342.	88.9	90	80

See footnotes at end of table.

MAJOR GROUP 35—MACHINERY (EXCEPT ELECTRICAL)—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
355	SPECIAL-INDUSTRY MACHINERY, NOT ELSEWHERE CLASSIFIED			
3551	Food-products machinery ----- Establishments primarily engaged in manufacturing machinery for use by the food-products and beverage manufacturing industries in the preparation, canning, or packaging of food products. Important products of this industry include bakers' machinery and equipment (bake ovens, bread-slicing machines, wrapping machines, and dough mixers); canning machinery; chocolate and confectionery machinery; dairy products machinery and equipment, including fluid milk processing machinery, butter, cheese, and ice cream machinery, condensed and evaporated milk machinery, and related equipment; flour-mill and grain-mill machinery; packing-house machinery; sugar-mill machinery; coffee-roasting and grinding machines, food choppers, grinders, mixers, and slicers; peanut roasters; popcorn machines; and parts and attachments. Establishments primarily engaged in manufacturing refrigeration machinery are classified in Industry 3585.	36.8	89	82
3552	Textile machinery ----- Establishments primarily engaged in manufacturing machinery for the textile industries. Important products of this industry include: (1) fiber-to-fabric machinery, such as picker, carding, combing, ginning, and spinning machines, doubling and twisting frames, winders, and beaming, warping, and slashing machines; (2) fabric machinery, such as knitting and braiding machines, looms for weaving, and Jacquard, lace, net embroidery, cordage, and rope machines; (3) machinery for bleaching, dyeing, printing, Mercerizing, finishing, and drying stock, yarn, and cloth; and (4) extra parts, attachments, and accessories, not elsewhere classified. Establishments engaged in manufacturing domestic or industrial sewing machines are classified in Industry 3583.	53.6	95	96
3553	Woodworking machinery (<i>Part of SIC Industry 3553, Woodworking machinery [excludes portable electric woodworking tools]</i>)----- Establishments primarily engaged in manufacturing machinery for sawmills, planing mills, cabinet and furniture makers, pattern makers, and veneer workers; and small woodworking machinery for home, shop, and professional craftsmen. Establishments primarily engaged in manufacturing hand tools such as planes, axes, drawknives, and hand saws are classified in Group 342, and portable electric woodworking tools in Industry 3542.	15.6	79	74
3554	Paper-industries machinery ----- Establishments primarily engaged in manufacturing machinery for the pulp, paper, and paper-product industries. Establishments primarily engaged in manufacturing printing-trades machinery are classified in Industry 3555.	17.1	85	89
3555	Printing-trades machinery (<i>Printing-trades machinery and equipment</i>)----- Establishments primarily engaged in manufacturing machinery and equipment used by the printing and bookbinding trades. Important products of this industry include book-binding and photoengraving machinery; printers' machinery such as presses, typesetting, typefoundry, electrotyping, and stereotyping machines; engravers' equipment (metal plates, wood blocks, and lithographic stones); printers' rollers, rules, sticks, blocks, and type cases; and type, leads, and slugs. Establishments primarily engaged in manufacturing textile-printing machinery are classified in Industry 3552.	24.8	95	96
3559	Special-industry machinery, n.e.c. (<i>Includes SIC Industry 3559, Special-industry machinery, not elsewhere classified; and industrial patterns and molds from 3998, Models and patterns, except paper patterns</i>)----- Establishments primarily engaged in manufacturing special-industry machinery, not elsewhere classified, such as smelting and refining equipment, cement-making, clay-working, cotton-ginning, glass-making, hat-making, incandescent lamp-making, leather-working, paint-making, rubber-working, tobacco-working, cigar and cigarette-making, shoe-making, and stone-working machinery. Establishments primarily engaged in manufacturing industrial patterns and molds for use in foundries, glass-making plants, plastic-working plants, etc., are classified in this industry.	68.1	82	79
356	GENERAL INDUSTRIAL MACHINERY			
3561	Pumps and compressors (<i>Pumps, air and gas compressors, and pumping equipment</i>)----- Establishments primarily engaged in manufacturing pumps, compressors, and pumping equipment for general industrial use. Important products of this industry include hand and power-driven pumps, pumps for fluid power systems, air compressors, gas compressors (except ice-making, refrigerating, and air-conditioning units—Industry 3585), and spraying and dusting units for paints and chemicals. Establishments primarily engaged in manufacturing measuring-and-dispensing pumps for gasoline service station use are classified in Industry 3586.	54.7	80	81

MAJOR GROUP 35—MACHINERY (EXCEPT ELECTRICAL)—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
356	GENERAL INDUSTRIAL MACHINERY—Continued			
3562	Elevators and escalators ----- Establishments primarily engaged in manufacturing passenger or freight elevators, automobile lifts, dumb-waiters, and escalators. Establishments primarily engaged in manufacturing commercial conveyor systems and equipment are classified in Industry 3563.	10.2	92	91
3563	Conveyors (Conveyors and conveying equipment) ----- Establishments primarily engaged in manufacturing conveyors and conveying equipment for installation in factories, warehouses, mines, and other industrial and commercial establishments. Establishments primarily engaged in manufacturing passenger or freight elevators, dumb-waiters, and escalators are classified in Industry 3562.	24.6	78	80
3564	Blowers and fans (Blowers, exhaust and ventilating fans) ----- Establishments primarily engaged in manufacturing blowers, and exhaust and ventilating fans for general industrial, commercial, and household use, including attic fans, blower-filter units (furnace blowers), and fans for mechanical draft. Establishments primarily engaged in manufacturing dust collection and related equipment are also included in this industry. Establishments primarily engaged in manufacturing complete air-conditioning units are classified in Industry 3585, and circulating fans for use on desks, pedestals, or wall brackets in Industry 3621.	14.8	75	78
3565	Industrial trucks and tractors (Industrial trucks, tractors, trailers, and stackers) ----- Establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, stackers, and accessories used for handling materials on floors and paved surfaces in and around industrial plants, depots, docks, and terminals. Establishments primarily engaged in manufacturing motor vehicles and motor-vehicle trailers are classified in Group 371, wheel-type and track-laying tractors in Industry 3521, and mining cars in Industry 3531.	14.0	84	84
3566	Power-transmission equipment (Mechanical power-transmission equipment, except ball and roller bearings) ----- Establishments primarily engaged in manufacturing mechanical power-transmission equipment such as chain drives, variable speed drives, speed reducers, gears, clutches (mechanical, hydraulic, or magnetic), shafts, bearings (except ball and roller bearings—Industry 3593), and parts for such equipment. Establishments primarily engaged in manufacturing automobile power-transmission equipment are classified in Industry 3717, and ball and roller bearings in Industry 3593.	54.3	87	86
3567	Industrial furnaces and ovens ----- Establishments primarily engaged in manufacturing electric, coal, gas, oil, and other fuel-fired or steam-heated industrial furnaces and ovens. Establishments primarily engaged in manufacturing electric heating units for furnaces and ovens are classified in Industry 3619.	6.3	86	74
3568	Mechanical stokers (Mechanical stokers, domestic and industrial) ----- Establishments primarily engaged in manufacturing domestic and industrial stokers for anthracite and bituminous coal, either hopper fed, or with a conveyor for direct feed from the bin.	4.1	71	74
3569	General industrial machinery, n.e.c. ----- Establishments primarily engaged in manufacturing machinery and equipment for general industrial use, and for which no special classification is provided. Machine shops primarily engaged in producing machine and equipment parts usually on a job or order basis are classified in Industry 3599, and machine shops engaged exclusively in repair work are classified in repair industries. Important products of this industry are closed types of industrial heat exchangers; hydraulic jacks; steam condensers; packaging and wrapping machines (except food and tobacco); and centrifugals and separators, except cream.	34.3	79	74
357	OFFICE AND STORE MACHINES			
3571	Computing and related machines (Computing machines and cash registers) ----- Establishments primarily engaged in manufacturing adding, calculating, tabulating, and bookkeeping machines; card-punching, sorting, and tabulating machines; and cash registers. Establishments primarily engaged in manufacturing typewriters are classified in Industry 3572, and office duplicating machines and devices in Industry 3579.	46.4	96	93
3572	Typewriters ----- Establishments primarily engaged in manufacturing typewriters and parts, including electric and nonelectric standard typewriters, specialized typewriters, and typewriter principle machines, such as continuous form-handling machines, billing machines without accounting registers, office composing machines, and stencil-cutting typewriters.	26.6	790	797

See footnotes at end of table.

MAJOR GROUP 35—MACHINERY (EXCEPT ELECTRICAL)—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
357	OFFICE AND STORE MACHINES—Continued			
3576	Scales and balances Establishments primarily engaged in manufacturing weighing devices of all types, including those with automatic computing mechanisms and coin-operated scales. Important products of this industry are industrial scales, retail and commercial scales, household and person weighing scales, mailing and parcel post scales, and railroad track and motor truck scales, as well as laboratory precision balances.	6.5	91	92
3579	Office and store machines, n.e.c. (<i>Includes SIC Industry 3575, vending, amusement and other coin-operated machines; and 3579, Office and store machines and devices, not elsewhere classified</i>)..... Establishments primarily engaged in manufacturing store and office machines and devices, not elsewhere classified, such as mimeograph and other duplicating devices; addressing and mailing machines; check-writing, signing and canceling machines; perforators and other protective devices; automatic merchandising machines; and amusement and other coin-operated machines; dictating machines; time recording and time stamping machines; and autographic registers. Establishments primarily engaged in manufacturing computing machines and cash registers are classified in Industry 3571; typewriters in Industry 3572; photocopy equipment in Industry 3861; coin-operated refrigerated beverage and ice cream dispensers in Industry 3585; coin-operated phonographs in Industry 3661; coin-operated scales and balances in Industry 3576; and coin-operated photographic apparatus in Industry 3861.	18.3	94	90
358	SERVICE AND HOUSEHOLD MACHINES			
3581	Domestic laundry equipment Establishments primarily engaged in manufacturing laundry equipment such as washing machines, wringers, driers, and ironers for household use. Establishments primarily engaged in manufacturing commercial laundry equipment are classified in Industry 3582.	28.4	90	91
3582	Laundry and dry-cleaning machinery (<i>Commercial laundry, dry-cleaning, and pressing machines</i>)..... Establishments primarily engaged in manufacturing laundry and dry-cleaning equipment and pressing machines for commercial and industrial use. Establishments primarily engaged in manufacturing domestic laundry equipment are classified in Industry 3581.	9.1	94	94
3583	Sewing machines Establishments primarily engaged in manufacturing sewing machines for domestic and industrial use. Establishments primarily engaged in producing parts and attachments for sewing machines (except needles, cases, and cabinets) are also included in this industry.	15.3	95	94
3584	Vacuum cleaners Establishments primarily engaged in manufacturing vacuum cleaners for domestic and industrial use.	14.9	84	88
3585	Refrigeration machinery (<i>Refrigerators, refrigeration machinery, and complete air-conditioning units</i>)..... Establishments primarily engaged in manufacturing mechanical and absorption refrigerators for commercial, industrial, and household use, refrigeration machinery, ice-making machinery and equipment, refrigerated showcases and cabinets, and complete air-conditioning units for domestic, commercial, and industrial use. Establishments primarily engaged in manufacturing soda fountains and beer-dispensing equipment are classified in Industry 3997. Establishments primarily engaged in manufacturing coin-operated refrigerated beverage dispensing, ice cream dispensing and other types of refrigerated merchandising machines are also included in this industry.	129.3	(2)	(2)
3586	Measuring and dispensing pumps Establishments primarily engaged in manufacturing measuring-and-dispensing pumps commonly used in service and filling stations for dispensing gasoline, oil, and grease, including grease guns. Establishments primarily engaged in manufacturing pumps, compressors, and pumping equipment for general industrial use are classified in Industry 3561.	12.1	76	98

See footnotes at end of table.

MAJOR GROUP 35—MACHINERY (EXCEPT ELECTRICAL)—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
358	SERVICE AND HOUSEHOLD MACHINES—Continued			
3589	Service and household machines, n.e.c. (Service-industry and household machines, not elsewhere classified) ----- Establishments primarily engaged in manufacturing machines and equipment, not elsewhere classified, for household use or for use in service industries. Establishments primarily engaged in manufacturing household and commercial electrical appliances are classified in Industry 3621. Important products of this industry are household and commercial dishwashing machines, water softeners, floor waxing and polishing machines, carpet sweepers, floor scrubbing machines, garbage-disposal units, and automotive service equipment.	11.2	83	82
359	MISCELLANEOUS MACHINERY PARTS			
3591	Valves and fittings, except plumbers' (Valves and fittings, except plumbers' valves) ----- Establishments primarily engaged in manufacturing valves for controlling the flow of liquids or gases in pipes and mains, and for machinery including parts and fittings for such valves. Establishments primarily engaged in manufacturing plumbers' fittings, (faucets, spigots, etc.) are classified in Industry 3431.	80.1	82	90
3592	Fabricated pipe and fittings ----- Establishments primarily engaged in cutting, threading, bending, and otherwise fabricating pipe and pipe fittings from purchased pipe. Establishments primarily engaged in manufacturing cast-iron pipe and fittings are classified in Industry 3321, welded and heavy-riveted pipe in Industry 3393, and seamless steel pipe in Industry 3312.	10.6	82	83
3593	Ball and roller bearings ----- Establishments primarily engaged in manufacturing ball and roller bearings and parts. Establishments primarily engaged in manufacturing bearings, except ball and roller, are classified in Industry 3566.	52.2	94	96
3599	Machine shops (Machine shops, jobbing and repair) ----- Establishments primarily engaged in producing machine and equipment parts, not elsewhere classified, from materials owned by them or performing machining operations on materials owned by others. These establishments usually operate on a job or order basis and are equipped with machine tools and other power-driven metalworking machinery capable of manufacturing a wide range of machine and equipment parts. Machine shops classified in this industry are characterized by their method of operation rather than their product, and the fact that they may be primarily engaged in repair work does not exclude them from this classification; however, machine shops engaged exclusively, or almost exclusively, in repair work are classified in repair industries.	58.2	91	74

MAJOR GROUP 36—ELECTRICAL MACHINERY

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes establishments engaged in manufacturing machinery, apparatus, and supplies for the generation, storage, transmission, transformation, and utilization of electrical energy. The manufacture of certain types of small electrical household appliances is included in this group, but machinery and equipment as well as other types of electrical appliances, powered by built-in or detachable electric motors are classified in Major Group 35.			

See footnotes at end of table.

MAJOR GROUP 36—ELECTRICAL MACHINERY—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
361	ELECTRICAL INDUSTRIAL APPARATUS			
3611	Wiring devices and supplies. Establishments primarily engaged in manufacturing wiring devices (attachment plugs and caps, convenience outlets, lamp sockets and receptacles, and snap switches); wiring supplies (pole-line hardware, conductor connectors, overhead trolley-line material, and rail bonds for both propulsion and signal circuits); electrical insulators and insulation materials, except porcelain insulators (Industry 3265), glass insulators (Industry 3229) and mica insulators (Industry 3299); conduits and fittings; and lightning arresters. Establishments primarily engaged in manufacturing electric lighting fixtures are classified in Industry 3471.	38.4	86	86
3612	Carbon and graphite products (<i>Carbon and graphite products for use in the electrical industry</i>). Establishments primarily engaged in manufacturing lighting carbons; carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; and other carbon, graphite, and metal-graphite products.	7.8	95	95
3613	Electrical measuring instruments (<i>Instruments for indicating, measuring, and recording electrical quantities and characteristics</i>). Establishments primarily engaged in manufacturing pocket, portable, panelboard, and graphic recording instruments for measuring electricity, such as volt meters, ammeters, watt meters, watt-hour meters, demand meters, and other meters and indicating instruments. This industry also includes establishments primarily engaged in manufacturing motor transformers, and analyzers for testing the electrical characteristics of internal-combustion engines, radio apparatus, etc.	20.9	84	80
3614	Motors and generators (<i>Includes part of SIC Industry 3614, Motors, generators, and motor-generator sets [excludes turbo-generators powered by steam and water power]; and propulsion-type motors and generators from 3641, Electrical equipment for motor vehicles, aircraft, and railway locomotives and cars</i>). Establishments primarily engaged in manufacturing electric motors and generators (other than automotive starting motors and battery charging generators); motor-generator sets; and gasoline and Diesel engine-driven generator sets. Establishments primarily engaged in manufacturing automotive starting motors and battery charging generators are classified in Industry 3641. Establishments primarily engaged in manufacturing electrical equipment for railway locomotives and cars; and motors, generators, and control equipment for gasoline-electric or oil-electric busses and trucks, including storage battery trucks, are classified in this industry. Turbo-generators powered by steam or water power are classified in Industry 3511.	127.0	80	92
3615	Transformers (<i>Power and distribution transformers</i>). Establishments primarily engaged in manufacturing power, distribution, and specialty transformers. Establishments primarily engaged in manufacturing radio-frequency or voice-frequency transformers, coils, or chokes are classified in Industry 3661.	36.6	85	91
3616	Electrical control apparatus (<i>Switchgear, switchboard apparatus, and industrial controls</i>). Establishments primarily engaged in manufacturing switchgear, switchboard apparatus, and industrial electrical controls. Important products of this industry include power switches, circuit breakers, contactors, and similar switchgear for general industrial application; switchboards and cubicles, control and metering panels; power fuse mountings, and similar switchboard apparatus and supplies; and industrial controls such as motor starters and controllers, electromagnetic brakes, and electronic inspection and gauging apparatus and positioning controls.	72.3	91	89
3617	Electrical welding apparatus. Establishments primarily engaged in manufacturing electrical welding apparatus, electrode holders, and other welding apparatus. Establishments primarily engaged in manufacturing gas welding apparatus are classified in Industry 3542.	7.3	93	89
3619	Electrical industrial apparatus, n.e.c. (<i>Includes SIC Industry 3619, Electrical equipment for industrial use, not elsewhere classified; and electric soldering irons from 3621, Electrical appliances</i>). Establishments primarily engaged in manufacturing industrial and commercial electrical apparatus and appliances, not elsewhere classified, including electric heating units for furnaces and ovens.	11.0	83	53

See footnotes at end of table.

MAJOR GROUP 36—ELECTRICAL MACHINERY—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
362	ELECTRICAL APPLIANCES			
3621	Electrical appliances (Includes part of SIC Industry 3621, Electrical appliances [excludes electric soldering irons]; and electric shavers from 3421, Cutlery) Establishments primarily engaged in manufacturing household and commercial electrical appliances used for heating, cooking, and other purposes. Important products of this industry are electric ranges, disc stoves, hot plates, cookers, casseroles, roasters, toasters, water heaters, irons, mixers, percolators, dry shavers, and circulating fans. Establishments primarily engaged in manufacturing domestic laundry machines are classified in Industry 3581, commercial laundry, dry-cleaning, and pressing machines in Industry 3582, sewing machines in Industry 3583, vacuum cleaners in Industry 3584, mechanical and absorption refrigerators in Industry 3585, and electric soldering irons in Industry 3619.	44.4	86	72
363	INSULATED WIRE AND CABLE			
3631	Insulated wire and cable Establishments primarily engaged in manufacturing insulated or armored wire and cable from purchased wire. Establishments engaged in drawing wire from purchased rods and bars and which are also engaged in making insulated wire are classified in Industry 3392.	21.3	97	32
364	ENGINE ELECTRICAL EQUIPMENT			
3641	Engine electrical equipment (Part of SIC Industry 3641, Electrical equipment for motor vehicles, aircraft and railway locomotives and cars [excludes propulsion-type motors and generators]) Establishments primarily engaged in manufacturing electrical equipment for internal-combustion engines. Important products of this industry include starting motors and battery-charging generators for automobiles, trucks and busses, aircraft and marine and stationary internal-combustion engines; and spark plugs, magnetos, coils, distributors, and other ignition apparatus for all internal-combustion engines. Electrical equipment for railway locomotives and cars; and motors, generators, and control equipment for gasoline-electric and oil-electric busses and trucks, including storage battery trucks, are included in Industry 3614.	43.9	89	91
365	ELECTRIC LAMPS			
3651	Electric lamps Establishments primarily engaged in manufacturing electric bulbs, tubes, and related light sources. Important products of this industry include incandescent filament lamps, vapor and fluorescent lamps, photoflash and photoflood lamps, and other electric light sources. Establishments primarily engaged in manufacturing electrotherapeutic lamp units for ultra-violet and infra-red radiation are classified in Industry 3693, electric lighting fixtures in Industry 3471, and glass blanks for bulbs in Industry 3229.	23.8	94	100
366	COMMUNICATION EQUIPMENT			
3661	Radios and related products (Radios, radio and television equipment—except radio tubes; radar and related detection apparatus; and phonographs) Establishments primarily engaged in manufacturing radio and television receiving and transmitting equipment, electrical and magnetic field detection apparatus, light and heat-emission detecting apparatus, object detection apparatus (radar), and other apparatus and products associated with radio equipment, including miscellaneous radio parts; phonographs and accessories (except records—Industry 3663); and public-address and music-distribution apparatus. Establishments primarily engaged in manufacturing radio-receiving and transmitting tubes are classified in Industry 3662.	178.6	(2)	(2)
3662	Electronic tubes (Includes SIC Industry 3662, Radio tubes; and nonradio electronic tubes, except X-ray, from 3693, X-ray and therapeutic apparatus and nonradio electronic tubes) Establishments primarily engaged in manufacturing radio receiving and transmitting tubes, and nonradio electronic tubes. Establishments primarily engaged in manufacturing X-ray tubes are classified in Industry 3693.	27.7	94	95
3663	Phonograph records Establishments primarily engaged in manufacturing phonograph records and record blanks.	10.0	96	99
3664	Telephone and telegraph equipment Establishments primarily engaged in manufacturing telephone and telegraph equipment, and parts specifically designed for inclusion in telephone and telegraph circuits. Establishments primarily engaged in manufacturing radio-telephone and radio-telegraph apparatus and supplies are classified in Industry 3661, and radio tubes in Industry 3662.	76.1	94	99

See footnotes at end of table.

MAJOR GROUP 36—ELECTRICAL MACHINERY—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
366	COMMUNICATION EQUIPMENT—Continued			
3669	Communication equipment, n.e.c. Establishments primarily engaged in manufacturing electrical communication equipment, not elsewhere classified, such as electric signaling apparatus, audible signals, burglar alarms, electric traffic signals, and railroad signaling devices.	11.0	86	83
369	MISCELLANEOUS ELECTRICAL PRODUCTS			
3691	Storage batteries. Establishments primarily engaged in manufacturing storage batteries.	16.6	790	99
3692	Primary batteries, dry and wet. Establishments primarily engaged in manufacturing primary batteries, both dry and wet types.	10.3	790	798
3693	X-ray and therapeutic apparatus (Part of SIC Industry 3693, X-ray and therapeutic apparatus and nonradio electronic tubes [excludes nonradio electronic tubes, except X-ray]) Establishments primarily engaged in manufacturing electrotherapeutic and electromedical apparatus, X-ray apparatus and tubes, and lamps for infra-red and ultra-violet radiation. Nonradio electronic tubes, other than X-ray tubes, are included in Industry 3662.	7.7	94	93
3699	Electrical products, n.e.c. (Part of SIC Industry 3699, Electrical products, not elsewhere classified [excludes extension cords]) Establishments primarily engaged in manufacturing electrical products, not elsewhere classified, such as supports, filaments, and lead-in wires for electric lamps, electrical hearing aids, and Christmas tree lighting outfits.	8.7	81	85

MAJOR GROUP 37—TRANSPORTATION EQUIPMENT

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
371	The Major Group as a Whole This major group includes establishments engaged in manufacturing equipment for transportation of passengers and cargo by land, air, and water. Important products produced by establishments classified in this major group include motor vehicles, aircraft, ships, boats, railroad equipment, and miscellaneous transportation equipment such as motorcycles, bicycles, and horse-drawn vehicles.			
371	MOTOR VEHICLES AND EQUIPMENT			
3717	Motor vehicles and parts (Includes part of SIC Industry 3711, Motor vehicles [excludes trucks and busses made from purchased chassis]; 3712, Passenger-car bodies; truck and bus bodies for motor vehicle producers from 3713, Trucks and bus bodies; and 3714, Motor-vehicle parts and accessories) Establishments primarily engaged in manufacturing or assembling complete passenger automobiles, trucks, commercial cars, and busses (except trackless trolleys—Industry 3742), and special purpose motor vehicles such as ambulances, fire engines, taxicabs, scout cars, personnel carriers, and amphibian motor vehicles. Establishments primarily engaged in manufacturing truck and bus bodies for motor vehicle companies, passenger-car bodies, and motor vehicle parts and accessories are also included in this industry. Parts and accessories include such products as motor vehicle engines and parts, brakes and parts, clutches, axles, radiators, differentials, transmissions, wheels and frames, windshield wipers, and oil filters and strainers. Establishments primarily engaged in manufacturing trucks and busses from purchased chassis are classified in Industry 3713, motorcycles in Industry 3751, wheel-type and track-laying tractors in Industry 3521, tires and tubes in Industry 3011, automobile glass in Major Group 32, motor vehicle hardware in Industry 3429, head lamps in Industry 3471, ignition systems in Industry 3641, and storage batteries in Industry 3691.	653.2	(2)	(2)

See footnotes at end of table.

MAJOR GROUP 37—TRANSPORTATION EQUIPMENT—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
371	MOTOR VEHICLES AND EQUIPMENT—Continued			
3713	Truck and bus bodies (<i>Includes part of SIC Industry 3713, Truck and bus bodies [excludes truck and bus bodies for motor vehicle producers]; and trucks and busses made from purchased chassis from 3711, Motor vehicles</i>) Establishments primarily engaged in manufacturing truck and bus bodies for sale to other than motor vehicle companies. Establishments producing trucks and busses from purchased chassis are also included in this industry. Establishments primarily engaged in manufacturing complete trucks and busses are classified in Industry 3717, and stamped body parts for trucks and busses in Industry 3463. The truck and bus body plants of motor vehicle companies and establishments producing truck and bus bodies for sale to motor vehicle companies are included in Industry 3717.	26.6	79	90
3715	Truck trailers Establishments primarily engaged in manufacturing truck trailers and tractor-type bus trailers, but not engaged in manufacturing complete trucks and busses.	12.0	82	88
3716	Automobile trailers (<i>Automobile trailers, for attachment to passenger cars</i>) Establishments primarily engaged in manufacturing trailers for attachment to passenger cars, but not engaged in manufacturing complete automobiles. Establishments primarily engaged in the manufacture of truck trailers and tractor-type bus trailers are classified in Industry 3715.	9.3	99	99
372	AIRCRAFT AND PARTS			
3721	Aircraft Establishments primarily engaged in manufacturing or assembling complete aircraft such as airplanes, gliders, dirigibles, and balloons, and which may also manufacture aircraft parts and auxiliary equipment. Establishments primarily engaged in manufacturing engines, propellers, and other aircraft parts and auxiliary equipment, but not engaged in manufacturing or assembling complete aircraft are classified in Industries 3722, 3723, and 3729, respectively.	146.6	(8)	(8)
3722	Aircraft engines (<i>Aircraft engines and engine parts</i>) Establishments primarily engaged in manufacturing aircraft engines and engine parts, but not engaged in manufacturing or assembling complete aircraft. Important products of this industry include internal-combustion and jet-propulsion engines; engine mount parts; air scoops; turbo superchargers; lubricating, cooling, and exhaust systems; non-electric starters; and aircraft engine pumps.	50.3	91	95
3723	Aircraft propellers (<i>Aircraft propellers and propeller parts</i>) Establishments primarily engaged in manufacturing aircraft propellers and propeller parts, but not engaged in manufacturing or assembling complete aircraft. Important products of this industry include variable and fixed pitch propellers, and propeller parts such as accumulators, blades, feathering pumps, and governors.	7.4	(8)	(8)
3729	Aircraft equipment, n.e.c. (<i>Aircraft parts and auxiliary equipment, not elsewhere classified</i>) Establishments primarily engaged in manufacturing aircraft parts and auxiliary equipment, not elsewhere classified, but not engaged in assembling complete aircraft. Important products of this industry include airframe assemblies, wing assemblies, flaps and dive brakes, elevators, fins, rudders, and other empennage assemblies, and alighting assemblies and parts such as landing and beaching gear, pontoons, and landing skis; auxiliary equipment such as de-icing equipment, bomb racks, turrets and turret drives, parachutes, targets, link trainers, and other auxiliary equipment specifically adapted for aircraft. Establishments primarily engaged in manufacturing or assembling complete aircraft are classified in Industry 3721, aircraft engines and parts in Industry 3722, propellers and propeller parts in Industry 3723, aeronautical instruments in Industry 3811, and aeronautical electrical equipment in Industry 3641.	15.3	81	38
373	SHIPS AND BOATS			
3731	Ship building and repairing Establishments primarily engaged in building and repairing all types of ships, barges, canal boats and lighters of more than 65 feet in length, whether propelled by sail or motor power or towed by other craft. Establishments primarily engaged in fabricating structural assemblies or components for ships, or subcontractors engaged in ship painting, joinery, carpentry work, electrical wiring installation, etc., are not classified in this industry. Shipyards engaged in repair work, either exclusively or as their major activity, are included in this industry.	130.2	(9)	(9)
3732	Boat building and repairing Establishments primarily engaged in building and repairing all types of boats of 65 feet or less in length, such as motorboats, sailboats, rowboats, lifeboats, and canoes. Small establishments (less than 10 employees) repairing boats, but not engaged in other manufacturing activity, are excluded from the scope of this census.	19.5	(9)	(9)

See footnotes at end of table.

MAJOR GROUP 37—TRANSPORTATION EQUIPMENT—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
374	RAILROAD EQUIPMENT			
3741	Locomotives and parts ----- Establishments primarily engaged in building and rebuilding locomotives (including frames and parts) of any type or gauge, including steam, compressed air, straight-electric, storage battery, Diesel-electric, gasoline-electric, and Diesel-mechanical. Railroad shops primarily engaged in locomotive repair are classified in nonmanufacturing industries.	30.3	95	83
3742	Railroad and street cars ----- Establishments primarily engaged in building and rebuilding railroad, street, and rapid-transit cars and car equipment for operation on rails for freight and passenger service. This industry also includes establishments primarily engaged in manufacturing trackless trolley busses and industrial rail cars (not suitable for carrier use). Establishments primarily engaged in manufacturing mining cars are classified in Industry 3531. Establishments primarily engaged in repairing railroad and street cars are classified in nonmanufacturing industries.	60.8	91	91
375	MOTORCYCLES AND BICYCLES			
3751	Motorcycles and bicycles (<i>Motorcycles, bicycles, and parts</i>)----- Establishments primarily engaged in manufacturing motorcycles and side cars; motor scooters; bicycles; and motorcycle and bicycle parts such as saddles, seat posts, frames, gears, and handlebars. Establishments assembling motorcycles or bicycles from purchased parts are also included in this industry. Establishments primarily engaged in manufacturing children's vehicles are classified in Industry 3943.	15.6	87	89
379	TRANSPORTATION EQUIPMENT, NOT ELSEWHERE CLASSIFIED			
3799	Transportation equipment, n.e.c. ----- Establishments primarily engaged in manufacturing transportation equipment, not elsewhere classified, such as horse-drawn vehicles (farm wagons and trucks, carriages, sleighs, and sleds) and parts; and wheelbarrows and pushcarts. Establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers are classified in Industry 3565, and children's vehicles in Industry 3943.	4.6	74	64

MAJOR GROUP 38—INSTRUMENTS AND RELATED PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes establishments engaged in manufacturing mechanical measuring, laboratory, and scientific instruments; optical instruments and lenses; surgical, medical, and dental instruments, equipment and supplies; ophthalmic goods; photographic equipment and supplies; watches and clocks. Establishments primarily engaged in manufacturing instruments for indicating, measuring, and recording electrical quantities and characteristics are classified in Industry 3613. Dental laboratories making dentures and artificial teeth to order for the dental profession, and establishments grinding ophthalmic lenses on an individual prescription basis are classified in nonmanufacturing industries.			
381	SCIENTIFIC INSTRUMENTS			
3811	Scientific instruments (<i>Laboratory, scientific, and engineering instruments—except surgical, medical, and dental</i>)----- Establishments primarily engaged in manufacturing laboratory, scientific, and engineering instruments such as nautical, navigational, aeronautical, surveying, drafting, mathematical instruments, and instruments for laboratory work and scientific research (except microscopes and telescopes—Industry 3831). Establishments primarily engaged in manufacturing surgical and medical instruments are classified in Industry 3841, dental instruments and equipment in Industry 3843, mechanical measuring and controlling instruments in Industry 3821, machinists' precision measuring tools in Industry 3543, and instruments for indicating measuring and recording electrical quantities and characteristics in Industry 3613.	20.4	82	84

MAJOR GROUP 38—INSTRUMENTS AND RELATED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
382	MECHANICAL MEASURING INSTRUMENTS			
3821	Mechanical measuring instruments (<i>Mechanical measuring and controlling instruments</i>)----- Establishments primarily engaged in manufacturing mechanical instruments for indicating, recording, measuring, and controlling temperature, pressure, mechanical motion, rotation, flow, liquid level, humidity, density, acidity, alkalinity, and combustion; dial pressure gauges; physical-property testing apparatus such as hardness, tension, compression, torsion, ductility, and elasticity testing apparatus; and instruments for household and office use such as thermometers, barometers, and rain gauges. Establishments primarily engaged in manufacturing instruments for indicating, measuring, and recording electrical quantities and characteristics are classified in Industry 3613, watches and clocks in Industry 3871, and measuring-and-dispensing pumps in Industry 3586.	53.2	83	84
383	OPTICAL INSTRUMENTS AND LENSES			
3831	Optical instruments and lenses ----- Establishments primarily engaged in grinding optical lenses and prisms, and in manufacturing microscopes, telescopes, field and opera glasses, and related optical instruments such as refractometers, spectrometers, spectroscopes, colorimeters, polariscopes, and optical measuring instruments. Establishments primarily engaged in manufacturing eyeglass lenses, frames, or fittings are classified in Industry 3851.	6.5	91	70
384	MEDICAL INSTRUMENTS AND SUPPLIES			
3841	Surgical and medical instruments ----- Establishments primarily engaged in manufacturing surgical, veterinary, orthopedic, and other medical instruments. Establishments primarily engaged in manufacturing surgical and orthopedic appliances are classified in Industry 3842, and electrotherapeutic, electromedical, and X-ray apparatus in Industry 3693.	7.0	83	88
3842	Surgical appliances and supplies (<i>Surgical and orthopedic appliances and supplies; and personal safety devices, not elsewhere classified</i>)----- Establishments primarily engaged in manufacturing surgical and orthopedic appliances and supplies, including surgical gut strings; hospital and surgical sterilizers; artificial limbs; fracture appliances; elastic hosiery, arch supports, and other foot appliances; abdominal supporters, braces, and trusses; sanitary napkins; bandages; surgical gauze and dressings; adhesive tapes and medicated plasters; and personal safety appliances and supplies, not elsewhere classified. Establishments primarily engaged in manufacturing surgical and medical instruments are classified in Industry 3841.	22.3	83	92
3843	Dental equipment and supplies ----- Establishments primarily engaged in manufacturing dental instruments, mechanical devices, and other equipment and supplies for use by dentists. Dental laboratories making dentures and artificial teeth to order for the dental profession are classified in service industries.	9.1	97	94
385	OPHTHALMIC GOODS			
3851	Ophthalmic goods ----- Establishments primarily engaged in grinding ophthalmic lenses, and in manufacturing other ophthalmic goods such as eyeglass frames or fittings. Retail establishments fitting eyeglasses to individual order are classified in trade industries. Establishments primarily engaged in grinding optical lenses to individual order are classified in non-manufacturing industries.	22.5	86	97
386	PHOTOGRAPHIC EQUIPMENT			
3861	Photographic equipment (<i>Photographic equipment and supplies</i>)----- Establishments primarily engaged in manufacturing photographic apparatus, equipment, and supplies. Important products of this industry include apparatus such as still cameras, motion-picture cameras, projection apparatus, photocopy and microfilm machines; equipment such as plate and film holders, tripods, film reels, developing tanks and machines, enlargers, and motion-picture screens; and supplies such as sensitized film, paper, and plates; and prepared developers, fixers, and toners. Establishments primarily engaged in manufacturing photographic paper stock (unsensitized), paper mats, mounts, easels, and folders are classified in Major Group 26, chemicals for photographic or technical purposes in Major Group 28, photographic glass in Major Group 32, and photographic lenses in Industry 3831. The processing of film and the respooling of film are classified in nonmanufacturing industries.	50.9	96	97

See footnotes at end of table.

MAJOR GROUP 38—INSTRUMENTS AND RELATED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
387	WATCHES AND CLOCKS			
3871	Watches and clocks (<i>Watches, clocks, and parts, except watchcases</i>) Establishments primarily engaged in manufacturing clocks including electric, watches, mechanisms for clockwork-operated devices, and clock and watch parts. This industry includes establishments primarily engaged in assembling clocks and watches from purchased movements and cases. Establishments primarily engaged in manufacturing watchcases are classified in Industry 3872, glass crystals in Industry 3231, and unbreakable crystals in Industry 3971. Establishments primarily engaged in manufacturing time-recording clocks, time-stamp machines, and watchmen's clocks are classified in Industry 3579.	34.6	97	98
3872	Watchcases Establishments primarily engaged in the manufacture of watchcases, for sale as such. Establishments whose primary activity is the assembling of watches from purchased movements and watchcases of their own manufacture are classified in Industry 3871.	5.6	87	94

MAJOR GROUP 39—MISCELLANEOUS MANUFACTURES

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes establishments primarily engaged in manufacturing products not classified in any other manufacturing major group. Industries in this group fall into the following categories: Jewelry, silverware and plated ware; musical instruments; toys, sporting and athletic goods; pens, pencils, and other office and artists' materials; buttons, costume novelties, miscellaneous notions, fabricated plastics products; brooms and brushes; morticians' goods; and other miscellaneous manufacturing industries.			
391	JEWELRY AND SILVERWARE			
3911	Jewelry, precious metal Establishments primarily engaged in manufacturing jewelry and other articles (to be worn on or carried about the person) made of precious metals with or without precious stones, including cigarette cases and lighters, vanity cases and compacts; trimmings for umbrellas and canes; and jewel settings and mountings. Establishments primarily engaged in manufacturing costume jewelry from nonprecious metal, including base metals electroplated with gold, silver, etc., and other materials are classified in Industry 3961.	25.6	92	95
3912	Jewelers' findings (<i>Jewelers' findings and materials</i>) Establishments primarily engaged in manufacturing unassembled jewelry parts, and stock shop products such as sheet, wire, and tubing. Establishments primarily engaged in lapidary work are classified in Industry 3913.	6.1	92	93
3913	Lapidary work Establishments primarily engaged in all types of lapidary work, including cutting and polishing diamonds and other precious stones; drilling pearls; recutting and setting stones; preparing jewels for instruments, tools, and for watches and chronometers; and preparing real and imitation stones for settings.	1.7	98	98
3914	Silverware and plated ware Establishments primarily engaged in manufacturing flatware (including knives, forks, and spoons), hollow ware, toilet ware, ecclesiastical ware, and related products made of sterling silver; of metal plated with silver, gold, or other metal; of nickel-silver; or of pewter.	21.5	98	97

See footnotes at end of table.

MAJOR GROUP 39—MISCELLANEOUS MANUFACTURES—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
393	MUSICAL INSTRUMENTS AND PARTS			
3931	Pianos. ----- Establishments primarily engaged in manufacturing complete pianos of all types.	7.0	94	100
3932	Organs. ----- Establishments primarily engaged in manufacturing complete pipe organs, reed organs, electronic organs, and organs with electrical amplification.	1.3	85	70
3933	Piano and organ parts (<i>Piano and organ parts and materials</i>) ----- Establishments primarily engaged in manufacturing piano and organ parts and materials. These products include piano strings, plates, keys, actions, keyboards, back frames, pedal attachments, hammers, sounding boards, organ reeds, pipes, stops, knobs, and music rolls. Establishments primarily engaged in manufacturing complete pianos are classified in Industry 3931, and complete organs in Industry 3932.	3.2	95	82
3939	Musical instruments, n.e.c. (<i>Musical instruments, parts, and materials, not elsewhere classified</i>) ----- Establishments primarily engaged in manufacturing all kinds of musical instruments, parts, and materials, except pianos (Industry 3931), organs (Industry 3932) and piano and organ parts and materials (Industry 3933). Important products of this industry include saxophones, trumpets, guitars, violins, drums, etc.	5.4	93	90
394	TOYS AND SPORTING GOODS			
3941	Games and toys, n.e.c. (<i>Games and toys, except dolls, and children's vehicles</i>) ----- Establishments primarily engaged in manufacturing indoor games and game sets for adults and children, and mechanical and nonmechanical toys. Important products of this industry include games such as chess, checkers, dominoes, puzzles, and other indoor games; and toys such as toy furniture, doll carriages and carts, construction sets, mechanical trains, toy guns and air rifles, and other mechanical games and toys. Establishments primarily engaged in manufacturing dolls are classified in Industry 3942, children's outdoor wheel goods and vehicles in Industry 3943, and sporting and athletic goods for children and adults in Industry 3949.	27.1	92	90
3942	Dolls. ----- Establishments primarily engaged in manufacturing dolls, doll parts, and doll clothing. Establishments primarily engaged in manufacturing stuffed toy animals are also classified in this industry.	9.8	89	98
3943	Children's vehicles. ----- Establishments primarily engaged in manufacturing baby carriages, strollers, and go-carts; children's velocipedes and tricycles, coaster wagons, play cars, sleds, and other children's outdoor wheel goods and vehicles.	8.8	81	79
3949	Sporting and athletic goods. ----- Establishments primarily engaged in manufacturing sporting and athletic goods, not elsewhere classified, such as fishing tackle; golf and tennis goods; baseball, football, basketball, and boxing equipment; roller skates and ice skates; gymnasium and playground equipment; billiard and pool tables; and bowling alleys and equipment. Establishments primarily engaged in manufacturing athletic apparel are classified in Major Group 23, small arms ammunition in Industry 1961, and firearms in Industry 1951.	29.8	94	90
395	OFFICE SUPPLIES			
3951	Pens and mechanical pencils (<i>Pens, mechanical pencils, and pen points</i>) ----- Establishments primarily engaged in manufacturing fountain pens, stylographic pens, mechanical pencils, pen points, penholders, and parts for pens and mechanical pencils.	15.6	93	95
3952	Lead pencils and crayons. ----- Establishments primarily engaged in manufacturing lead pencils, pencil leads, and crayons. Establishments primarily engaged in manufacturing mechanical pencils are classified in Industry 3951.	6.3	91	90
3953	Hand stamps and stencils (<i>Hand stamps, stencils, and brands</i>) ----- Establishments primarily engaged in manufacturing rubber and metal hand stamps, dies, and seals; steel letters and figures; stencils for use in painting or marking; and branding irons.	4.7	90	89

See footnotes at end of table.

MAJOR GROUP 39—MISCELLANEOUS MANUFACTURES—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
395	OFFICE SUPPLIES—Continued			
3954	Artists' materials ----- Establishments primarily engaged in manufacturing materials and equipment for art work, such as airbrushes, drawing tables and boards, palettes, sketch boxes, pantographs, artists' colors and waxes, pyrography goods, drawing inks, and drafting materials. Establishments primarily engaged in manufacturing drafting instruments are classified in Industry 3811.	1.4	79	74
3955	Carbon paper and inked ribbons ----- Establishments primarily engaged in manufacturing carbon paper, spirit and gelatin process stencil paper, and inked ribbons for typewriters, adding, and other business machines.	3.7	790	790
396	COSTUME JEWELRY AND NOTIONS			
3961	Costume jewelry (<i>Includes SIC Industry 3961, Costume jewelry and costume novelties, except precious metal; cigar and cigarette cases, vanity cases and compacts, except precious metal, from 3986, Jewelry cases and instrument cases; and cigar and cigarette lighters, except precious metal, from 3999, Miscellaneous fabricated products, not elsewhere classified</i>)----- Establishments primarily engaged in manufacturing costume jewelry, costume novelties, cigarette cases, compacts, vanity cases, cigarette lighters, and ornaments made of all materials, except precious metal and precious or semiprecious stones (Industry 3911).	25.4	90	90
3962	Artificial flowers (<i>Feathers, plumes, and artificial flowers</i>)----- Establishments primarily engaged in manufacturing artificial flowers, fruits, and foliage made from all materials, except glass (Industry 3231); in producing fancy feathers, plumes, and articles made principally of feathers and plumes; and curling, dyeing, and renovating ostrich feathers for the trade.	7.1	97	99
3963	Buttons ----- Establishments primarily engaged in manufacturing buttons, button parts, and button blanks and molds, of all materials, except precious metal and precious and semiprecious stones (Industry 3911).	10.4	93	94
3964	Needles, pins, and fasteners (<i>Needles, pins, hooks and eyes, and similar notions</i>)----- Establishments primarily engaged in manufacturing notions such as machine and hand needles, pins, hooks and eyes, eyelets, buckles, and slide and snap fasteners.	23.0	91	89
397	PLASTICS PRODUCTS, NOT ELSEWHERE CLASSIFIED			
3971	Plastics products, n. e. c. (<i>Fabricated plastics products, not elsewhere classified</i>)----- Establishments primarily engaged in molding primary plastics for the trade, and manufacturing finished plastics products, not elsewhere classified. Establishments primarily engaged in manufacturing plastics materials in the form of sheets, rods, tubes, granules, powders, or liquids are classified in Industry 2823.	60.1	88	91
399	MISCELLANEOUS MANUFACTURES			
3981	Brooms and brushes ----- Establishments primarily engaged in manufacturing household, industrial, and street-sweeping brooms; and brushes such as paint brushes, tooth brushes, toilet brushes, and household and industrial brushes.	18.6	94	99
3982	Cork products ----- Establishments primarily engaged in manufacturing cork products from whole or ground cork. Important products of this industry include bottle corks, life preservers, insulating materials, tile, and other articles made of cork. Establishments primarily engaged in manufacturing cork gaskets are classified in 3293, and linoleum and cork floor coverings in Industry 2274.	2.5	88	75
3983	Matches ----- Establishments primarily engaged in manufacturing matches, regardless of the material used.	7.4	100	100
3984	Candles ----- Establishments primarily engaged in manufacturing candles for lighting or for decorative and ceremonial purposes from such materials as fatty acids, mineral or animal waxes.	2.4	91	87

See footnotes at end of table.

MAJOR GROUP 39—MISCELLANEOUS MANUFACTURES—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
399	MISCELLANEOUS MANUFACTURES—Continued			
3985	Fireworks and pyrotechnics ----- Establishments primarily engaged in manufacturing fireworks of all kinds, flares, flash-light bombs, and railroad torpedoes and fuses. Establishments primarily engaged in manufacturing safety fuses and detonators are classified in Industry 2826.	3.3	97	96
3986	Jewelry and instrument cases (<i>Part of SIC Industry 3986, jewelry cases and instrument cases [excludes cigar and cigarette cases, vanity cases, and compacts]</i>)----- Establishments primarily engaged in manufacturing cases, fancy boxes, and trays for jewelry, instruments, cutlery, eyeglasses, combs, pipes, toilet sets, etc. Cigar and cigarette cases, compacts and vanity cases not made of precious metals are included in Industry 3961. Establishments primarily engaged in manufacturing similar cases of leather are classified in Industry 3172, and precious metals in Group 391.	7.4	83	82
3987	Lamp shades ----- Establishments primarily engaged in manufacturing lamp shades of all materials, except glass (Industry 3229) and metal (Industry 3471).	4.5	93	93
3988	Morticians' goods ----- Establishments primarily engaged in manufacturing caskets, coffins, burial cases, and coffin shipping cases, whether of wood or other materials (except concrete—Industry 3271); morticians' supplies and accessories such as burial garments, gloves, slippers, casket linings, and embalming fluids; and morticians' paraphernalia and equipment.	22.4	90	97
3991	Beauty and barber-shop equipment (<i>Includes part of SIC Industry 3991, Beauty-shop and barber-shop equipment [excludes special furniture, other than hydraulic chairs]; and hair clippers for human use from 3421, Cutlery</i>)----- Establishments primarily engaged in manufacturing equipment for use in beauty shops and barber shops. Hair clippers for use on humans are included in this industry. Hydraulic chairs and couch units are classified in this industry, but all other furniture used in beauty and barber shops is classified in Industry 2532. Cosmetics, soaps, and permanent waving solutions are classified in Major Group 28.	4.1	59	79
3992	Furs, dressed and dyed ----- Establishments primarily engaged in scraping, currying, tanning, bleaching, and dyeing pelts.	6.8	(³)	(³)
3993	Signs and advertising displays ----- Establishments primarily engaged in manufacturing electrical, mechanical, cut-out, or plate signs and advertising displays, including neon signs and advertising novelties. Sign-painting shops doing business on a custom basis are classified in service industries. Establishments primarily engaged in manufacturing electric signal equipment are classified in Industry 3669, and lighting fixtures in Industry 3471.	28.9	95	88
3994	Hair work ----- Establishments primarily engaged in manufacturing wigs, toupees, transformations, switches, and related articles made largely from human hair, but in some cases from animal hair or various fibers. Establishments primarily engaged in making wigs for dolls are also included in this industry.	1.2	1 95	99
3995	Umbrellas, parasols, and canes ----- Establishments primarily engaged in manufacturing umbrellas, parasols, canes, and trimmings, frames, handles, and other parts.	3.6	97	100
3996	Tobacco pipes (<i>Tobacco pipes and cigarette holders</i>)----- Establishments primarily engaged in manufacturing tobacco pipes, and cigarette and cigar holders.	3.1	(^d)	(^d)
3997	Soda-fountain and bar equipment (<i>Soda-fountain and beer-dispensing equipment</i>)----- Establishments primarily engaged in manufacturing soda fountains and beer-dispensing equipment; and tanks, siphons, and other parts and accessories for such equipment.	2.7	83	76
3998	Models and patterns, except paper (<i>Part of SIC 3998, Models and patterns, except paper patterns [excludes industrial patterns and molds]</i>)----- Establishments primarily engaged in manufacturing models, patterns, and forms of all materials, except paper patterns (Industry 2699), shoe display forms (Industry 2492), and patterns and molds for industrial uses—foundries, etc. (Industry 3559).	1.9	96	91

See footnotes at end of table.

MAJOR GROUP 39—MISCELLANEOUS MANUFACTURES—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
399	MISCELLANEOUS MANUFACTURES—Continued			
1951	Small arms ----- Establishments primarily engaged in manufacturing small firearms having a bore under 20 mm. (caliber .60 and under). Important products of this industry include machine guns and other automatic arms, rifles, carbines, pistols, revolvers, shotguns, pyrotechnic pistols and projectors, machine gun mounts, and parts for small firearms.	10.5	95	98
1961	Small arms ammunition ----- Establishments primarily engaged in manufacturing ammunition for small arms having a bore under 20 mm. (caliber .60 and under). Establishments primarily engaged in manufacturing blasting and detonating caps and safety fuses are classified in Industry 2826, and fireworks in Industry 3985.	8.1	90	90
3999	Miscellaneous products, n.e.c. (<i>Part of SIC Industry 3999, Miscellaneous fabricated products, not elsewhere classified [excludes cigar and cigarette lighters]</i>)----- Establishments primarily engaged in manufacturing portable fire extinguishers; theatrical scenery and advertising curtains; braided articles; holiday goods; military insignia; identification plates, badges, emblems, and tags; and many other small articles, not elsewhere classified. Establishments primarily engaged in wool pulling and in dressing hair and bristles are also included in this industry.	20.6	89	92
	SPECIAL REPORT			
	Motion pictures ----- Establishments primarily engaged in the production of motion-picture films. This industry covers all activities and processes connected with the production of motion-picture films, such as the preparation of stories and scenes, photography, development of exposed films, the printing of projection films, and other necessary studio and laboratory work. Distribution and exhibition of motion-picture films are not included.	34.8	(3)	(3)

^d Withheld to avoid disclosing figures for individual companies.

¹ Percentage of value of primary products to total shipments, including primary and secondary products, and miscellaneous receipts for contract and commission work on materials owned by others, scrap and salable refuse, repair, etc.

² Percentages not meaningful because total value of primary products shipped by specified industry includes a significant amount of duplication.

³ Relationships not meaningful because of the predominance of miscellaneous receipts, particularly receipts for contract and commission work on materials owned by others.

⁴ Value of finishing own goods by this industry as a percent of value of finishing of own goods by all industries.

⁵ Percentage based on quantity of yarn production rather than value of shipments.

⁶ An unknown amount of receipts for toll operations are included in primary products.

⁷ These are minimum percentage figures. The exact percentage cannot be shown without disclosing figures for individual companies.

⁸ Percentages not meaningful because total value of primary products shipped by the specified industry does not reflect the larger expenditures made by establishments during the year for research, design, and developmental work.

⁹ Percentages not meaningful because of the large proportion of receipts for repair work to total value of shipments.